```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -MODEL=frame+_p2n.model -DEV=xlp
-Q=/abss/ABSSWEB spool/US10785135/runat 15092006 155346 22577/app_query.fasta_1
-Q=/abss/ABSSWEB spool/US10785135/runat 15092006 155346 22577/app_query.fasta_1
-DB=Issued Patents NA -QFMT=fastap -SUFFIX=p2n.rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=Dits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=sct -HABSIZE=500 -MINLEN=0000000000
-MOST=abss02p -USER=US10785135 @CGN 1 1 541 @runat 15092006 155346 22577
-NCPU=6 -ICPU=3 -NO MMAP -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV TIMEDUT=10 -MARN INDSOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-PGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -MODEL=frame+ p2n.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein - nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     on:
                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                             and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                    Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1403666 seqs, 935554401 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                September 18, 2006, 01:17:09; Search time 311 Seconds
  100.0
100.0
43.7
43.7
36.5
33.4
6.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MKEAGQMQNLESARAGRSVS......RHCMVQARLLAYRTGELHRS 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-785-135-2
1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                    /EMC_Celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6A_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6B_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
1017
1585
1555
1555
1555
489
489
5567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.
                       US-09-802-371-3

US-09-802-371-1

US-09-27-357-25

US-09-973-278-37

US-09-973-278-37

US-09-513-999C-4059

US-09-613-976-132

US-08-899-241-1
                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 frame_plus_p2n model
                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (without alignments)
3059.353 Million cell updates/sec
                                           Sequence 3, Appli
Sequence 1, Appli
Sequence 25, Appl
Sequence 37, Appl
Sequence 4059, Ap
Sequence 132, App
                                                                                                                                                                                                                       Description
e 1, Appli
e 9217, Ap
                                                                                                                                                                         SCOLE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a a
```

	4 5	44	43	42	41	40	39	38	37	36	3 5	. 34	ω G	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	,
		97		7					97	7.	97.5	.7			œ	œ	98.5	œ	99	99	99	0	101	0	0	σ	09.	9	110	-	\mathbf{L}	112.5	'n	'n	12.	112.5	17.	
	•	•	•	•	•	•	•	٠	•	•	5.6	•	•	•	•	•	•	•	•	5.6	•	٠	•	•	٠	6.1	•	'n	'n	'n	'n	6.4	٠	•	٠	6.4	6.7	
	3336	3336	3336	3336	3336	2899	1029	1029	795	5822	5822	1351	4026	258	3735	994	669	516	3453	1248	807	1644	510	7588	7588	566	2902		83012	1830121	83012	3618	22	8	င္မ	1032	23	
	w	w	w	ω	N	w	w	ω	w	w	ω	ω	w	w	ω	w	w	ω	w	w	w	w	ω	ω	w	տ	w	w		ω		ω	w	w	ω	w	w	
,	-09-227-806-	-09-369-7	-09-225-967-	-08-978-456-	-08-977-554-	-09-270-767-	-09-369-700-	-80-	9-543-681A	-08-899-595-	-899-595-	-09-221-017B-23	-09-248-796A-497	-09-134-001C-22	-09-543-681A-210	-09-864-67	-09-221-017B-28	-09-134-000C-3	-09-023-655-1	-09-252-991A-100	-09-252-991A-9914	-09-252-991A-101	-09-543-681A-36	-08-781-986A-1	8-956-171E-14	9-974-300-59	9-710-279-	9-710-279-324	10-158-865-1	US-09-643-990A-1	09-557-884-	9-710-279-338	-09-710-279-368	-09-134-001C-2	-09-710-279-196	-710-279-162	-09-902-540-98	
	equence 7, Appl	equence 7,	equence 7, Appl	equence 7, App	equence 7, App	equence 137	e 1, App	equence 1, App	equence 2160,	e 5, Ar	equence 4,	equence 236,	e 4971,	equence 2273,	equence 2102,	equence 1, Ap	equence 288,	e 341,	equence 1323,	equence	equence 9914,	equence 10161	equence 364,	e 142,	e 142	equence 592, 1	quence 4170	equence 3241,	equence 1, Appl	e 1	equence 1, Appl	equence 3387,	equence 3688,	equence 2313,	equence 1963,	equence 1625,	equence 986, A	

ALIGNMENTS

```
US-09-802-371-1

Sequence 1, Application

Patent No. 6723533

GENERAL INFORMATION:
                                                                                                                                                                                                  281
                                                                            196
                                                                                                 321
                                                                                                                            901
                                                                                                                                                   301
                                                                                                                                                                            841
                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \vdash
                                                                          HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
                                                                                                                           SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg
                                                                                                                                                                            LeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGlyPheTyrArg
                                                                                                                                                                                                                                                                             LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ASPLYSATGGINVAILYSATGThTGIYLEUVAIVAILYSASNMETLYSIIEVAIGIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                                                                                                                                                                                                                           GluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLysAspLeuIle
                                                                                                                                                                                                                                                                                                                                            ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                              GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                               CCGGATGCTAACACTGACTTTATTATGAATGTAAACAAGAAAAGAATAAAAGAATATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr
                          US/09802371
                                                                            1017
                                                                                                                                                                             900
                                                                                                                                                                                                     300
                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: CDS
; LOCATION: (149)...(1165)
; LOCATION: (149)...(1165)
; NAME/KEY: misc feature
; LOCATION: (1)...(1585)
; OTHER INFORMATION: n = A,'
US-09-802-371-1
                               5
                                                               8
                                                                                δ
                                                                                                          B
                                                                                                                                  Ş
                                                                                                                                                                 밁
                                                                                                                                                                                      Ś
                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-785-135-2 (1-339) x US-09-802-371-1 (1-1585)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. 6723533el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 105/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1 1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1585
                                                                                                                                                                   509
                                                                                                                                                                                                                                                                     389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        149
               689
                                       181
                                                                 629
                                                                                        161
                                                                                                                                        141
                                                                                                                                                                                          121
                                                                                                                                                                                                                   449
                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                      329
                                                                                                                                                                                                                                                                                                                                                                     269
                                                                                                                                                                                                                                                                                                                                                                                                                       209
                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                  LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                      ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr
                                                                ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                              IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                 AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                       AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                  AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.8e-212
1755.00
100.0%
100.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
```

60

268 40 208 20

388 80 328 뭐 ঠ 밁 Ś 밁 8 ₽ ঠ 밁 S В S В ঠ 밁 5 밁 S 밁

ð 밁 Ş

밁

200 889 180 628 160 895 140 508 120 448 100

Ś

당 Š

B

밁 S 밁 ર્ В δ

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 63425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                     EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                       EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                             BARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-227-357-25
                                                                                                                    EARLIER
                                                                                                                                      BARLIER
                                                                                                                                                                                                                                                                PARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                           SARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                            ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARLIER
                                                                                                                                                                                                                                                                                                                                                                                        ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                         ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICANT: Fischer et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TLE OF INVENTION: 123 Human Secreted Proteins LE REFERENCE: PZ010P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  608
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,928
APPLICATION 1997-07-08
APPLICATION NUMBER: 707-08
                                                              APPLICATION NUMBER: 60/052,795
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                           FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,932
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1999-01-08
APPLICATION NUMBER: PCT/US98/13684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                   APPLICATION NUMBER: 60/052,733
                                                                                                                                                     APPLICATION NUMBER: 60/051,920 FILING DATE: 1997-07-08
                                                                                                                                                                                          FILING DATE: 1997-07-08
                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/052,732
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/051,926 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/227,357
                                                                                                                    FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGlyPheTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLysAspLeuIle 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetLeuPheLeuValSerAønGluGluMetHisLy8GlnIleLeuMetThrIleGlyLeu 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGlu 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09227357
                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      808
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                          NAME/KEY: SITE; LOCATION: (1551); OTHER INFORMATION: US-09-227-357-25
                                                        Score:
                                                                    Pred. No.:
                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
                                                                                                                                                                                       FEATURE: "FEATURE! NAME/KEY: SITE (1396)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                                            NAME/KEY: SITE
LOCATION: (1391)
OTHER INFORMATION:
                                                                                                                                                                                 LOCATION: (1396)
OTHER INFORMATION:
                                                                                                                                                                      FEATURE
                                                                                                                                                                                                                                       OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: n
                                                                                                                                                                                                                                                   OCATION:
                                                                                                                                                                                                                                                                 NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (1248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,684
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,964
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60 FILING DATE: 1997-09-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-09-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/055,950 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/055,949 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LING DATE: 1997-08-18
                                                                                                                                                                                                                                                      (1393)
                                                                                                                                                                                                                                                                                                                                                                     (1389)
             6.87e-87
767:00
41.1%
38.5%
43.7%
                                                                                                                           Ħ
                                                                                                                                                                                Ħ
                                                                                                                                                                                                                                       Þ
                                                                                                                                                                                                                                                                                             Ħ
                                                                                                                                                                                                                                                                                                                                                    Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                             equals
                                                                                                                          equals
                                                                                                                                                                                 equals
                                                                                                                                                                                                                                      equals
                                                                                                                                                                                                                                                                                             equals
                                                                                                                                                                                                                                                                                                                                                    equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/058,660
                                                                                                                          a,t,
                                                                                                                                                                                a,t,g,
                                                                                                                                                                                                                                                                                             a,t,g,
                                                                                                                                                                                                                                                                                                                                                    a, t, g,
                                                                                                                                                                                                                                                                                                                                                                                                            a,t,g,
                                                                                                                                                                                                                                      a,t,g,
                                                                                                                          ò
             Conservative: Mismatches: Indels:
                                                     Length:
Matches:
                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                      ဂ
```

US-10-785-135-2 (1-339) x US-09-227-357-25 (1-1555)

908 AAAGTTAATATTGCCCTTCAGACACCATCCCAACATCACATAAGAATTTTTTCATGTTAT 967 123	103 -CyssersergluaspLeuHisalaGlyGlnIleAlaLeuIleLysHis 118	LeuttpmetGluLeupheProAlaGluAlaGlnArgGlnLysSerGlnLysAsmGluGlu	4 AlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSerThrGlnThr 23
PRIOR FILING DATE: 1997-07-08 PRIOR APPLICATION NUMBER: 60/051,916 PRIOR APPLICATION NUMBER: 60/051,916 PRIOR APPLICATION NUMBER: 60/051,930 PRIOR FILING DATE: 1997-07-08 PRIOR APPLICATION NUMBER: 60/051,918 PRIOR APPLICATION NUMBER: 60/051,918 PRIOR APPLICATION NUMBER: 60/051,920 PRIOR APPLICATION NUMBER: 60/051,920 PRIOR PILING DATE: 1997-07-08 PRIOR PILING DATE: 1997-07-08 PRIOR APPLICATION NUMBER: 60/052,733 PRIOR PILING DATE: 1997-07-08	WT FILING DATE: 2001-10-10 APPLICATION NUMBER: 60/239,899 FILING DATE: 2000-10-13 APPLICATION NUMBER: 09/227,357 FILING DATE: 1999-01-08 APPLICATION NUMBER: 09/227,357 FILING DATE: 1998-07-07 APPLICATION NUMBER: 60/051,926 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,793 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,925 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,925 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,803 APPLICATION NUMBER: 60/052,803 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,732 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,931 APPLICATION NUMBER: 60/051,931 APPLICATION NUMBER: 60/051,932	1208 ATTTTAATGCATGGAAGA 157 UIIESETLEULEUTHTGIU 1268 AATAAGTTTGCTTACGGAG 177 IGluArgLeuLysSerAsn 179 STYIMET VAIGINPHEVAI 1328 GGAAAGATTGAAGTTGAAGTCAAAC 197 STYIMET VAIGINPHEVAI 1388 TNANANGGNGCAGTTTGTA 217 rLysThrLeuProAspAla 217 rLysThrLeuProAspCadac 217 rL	Db 1088 CTTTGCTTGCTATTTTAAAGAATGCTGCACTAAATGTGAATGCTTGAGATTTCTTCTCTG 1147 Qy 138 143

8 8 8 8

유정

B & B &

음 성

B & B &

B & B &

₹9

8 8 8 8

밁

```
PRIOR FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/051,928
PRIOR APPLICATION NUMBER: 60/055,722
PRIOR APPLICATION NUMBER: 60/055,723
PRIOR APPLICATION NUMBER: 60/055,949
PRIOR PILLING DATE: 1997-08-18
PRIOR PILLING DATE: 1997-08-18
PRIOR PILLING DATE: 1997-08-18
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,944
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,944
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,944
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,984
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,984
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,984
PRIOR PILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/058,664
PRIOR PILLING DATE: 1997-08-12
PRIOR APPLICATION NUMBER: 60/058,664
PRIOR PILLING DATE: 1997-09-12
PRIOR APPLICATION NUMBER: 60/058,661
PRIOR PILLING DATE: 1997-09-12
PRIOR PILLING DATE: 1997-0
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                    Score:
                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/052,795
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
FILING DATE: 1997-07-08
  6.87e-87
767.00
41.1%
38.5%
43.7%
                       Length:
Matches:
Conservative:
Mismatches:
Indels:
```

1028 ACCATTCCCCTATTTTGGTCATTTAGGTTTTTGGGTTTTGGGTTTTTTGTTTTÅÅĆGT 1087	dd	
124AsnCy 125	Qy	
968 AAATTCTTTGTGGACATATTTGATAACTGTTTTATTATGAGGAGGACCATAATTAAT	Db	
123 123	Qy	
908 AAAGTTAATATTGCCCTTCAGACACCATCCCAACATCACATAAGAATTTTTTCATGTTAT 967	מם	
123 123	Qy	
848 CACTGATTGAAAAATGATCTATTTAGTTTGTTTTTTGTCTTTAATTTTTGTAAGCTTTAA 907	מם	
123 123	Qy	
788 GTGCTCTAATGAATTGAAATATTTTCTGTATATTAAACATTACTAACCTTTCCTCTGTCA 847	Db	
119GlySerArgLeuLys 123	Qy	
728 ACAAATTGTCTGTTCGTATCTTTTTGTCTCTCTTTAGGCCTTATTCTTGTCAATTCATAT 787	Дb	
118 118	Qy	
668 ATTTCAAATACAAATTAAAATATTTTTTCACATTTGTTATCCTGTTATGTTTTCTCTCTTTT 727	Db	
118 118	γ	
608 CTGTTCATTAATTGACGAACATTTGTGTACTTAACTATGTATAAGGCATCTCATCGTTCA 667	рb	
103 -CysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHis 118	γo	
::: 548 AAAAAATCTCTCCTAGCTGAAATTACATGCAGTACTAGCAAAGGGTCTCTTTGTTATAAA 607	Db	
93 ltysasnMettysIleValGlyLeuHis 102	Q	
ngggtagaacactctgtgggctctcttttctatttccttct	Db	
89	γQ	
 428 ACCAGGGAGTGGATAGAATGTTTATTTGTTTAACTGAGACTTTTTAGTTCATCAATTATT 487	σd	
88 Thr 88	, Qy	
368 GATATGAGGTTTGAGGCCTTCAAAATTGCTTTGCAGCATAAGCCACAGTGAGTCAGGAGT 427	Db	
85ValLysArg 87	Qγ	
308 GAAATGGATTATGAGAACTCGAACAGAGGGAAAGGTGAAATGCAACCGGAGGAAACACTCT 367	מם	
84 84	9	
248 CAGGATTACTGGGAGCAGCTAAGATGCCTARATGAAAGGTTTACCATCACTGCTGGTTAG 307	Db	
84 Gln	Qy	
188 GGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGA 247	מם	
64 GlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAspLysArg 83	Qy	
44 LeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsnGluGlu 63 	Db Qy	
68 GGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACTCTGGCTCAGC 127	סס	
24 GlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThrLeuLeuSer 43	Q	
8 GCTGGGCAGATGCAAAATCTGGAGAGCGCGGAGGGCCGGGCGGTCAGTCA	Db .	
US-10-785-135-2 (1-339) x US-09-973-278-37 (1-1555) Qy	Oy Oy	
1055-17	Tre_1	

```
Query Match:
             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-513-999C-4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                  Alignment Scores:
                                                                                             US-09-513-999C-4059
                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 4059
LENGTH: 489
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags
Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4059, Application US/09513999C
Patent No. 6783961
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/513,999C CURRENT FILING DATE: 2000-02-24 PRIOR APPLICATION NUMBER: US 60/122,487 PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dumas Milne Edwards,
APPLICANT: Duclert, A.
                                                                                                                      NAME/KEY: UNSURE LOCATION: 121
                                                                                                                                                            NAME/KEY: misc_feature LOCATION: 458
OTHER INFORMATION: r=a
                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                           OTHER INFORMATION:
                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                 NAME/KEY: CDS
LOCATION: 98..460
                                                      Х
О
: :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sAspLeuTyrPheSerArgLysProCysSerAlaCys---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sGluTyrGluMetLeu 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TNANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTAC 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAAAGÁTTGAAGTCÁÁACAGTCGGGCCCÁTGTGTGTGTCTTÁCTTCAACCTTTGGTGTG 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        uIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVa 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTTAGAATATTTTCCTAGAATGGATTCTCAGAAGAATTCTCAGTCTGTGGAGAGGAAC 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTGCTTGCTATTTTAAAGAATGCTGCACTAAATGTGAATGCTTGAGATTTCTTCTCTCTG 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCy
                                                                                                           Xaa=Gly
 1.38e-71
640.00
99.2%
99.2%
36.5%
                                                                                                                                                               ç
                                                                                                           o
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---AlaGlyValAsnArgIleSerTyrTrpProAlaAspProGl
                                                                                                           Ser
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuLysMetIleValAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                       Encoded Human Proteins.
    489
130
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137
                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
               US-10-785-135-2 (1-339)
                                                                                                            Pred. No.:
                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-621-976-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                   US-09-621-976-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 132, App
Patent No. 663906
                                                                                                                                                                OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86
```

```
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTs and Encoded Human P
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION UNMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 132
LENGTH: 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-785-135-2 (1-339) x US-09-513-999C-4059 (1-489)
                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: CDS
LOCATION: 124..477
NAME/KEY: sig_peptide
LOCATION: 124..273
OTHER INFORMATION: Von Heijne matrix
OTHER INFORMATION: secre 6
NAME/KEY: misc_feature
LOCATION: 394
COTTER INFORMATION: n-a G COTTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               338 GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       458 RG-CTGANAAACTGTGATCTTTATTTTTCCAGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        218 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgLeuLysAsnCysAspLeuTyrPheSerArg 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspLysArgGlnValLysArgThrGlyLeuValValLysAsnMetLysIleValGly 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AÄTGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09621976
                                          9.71e-65
586.00
98.3%
98.3%
33.4%
x US-09-621-976-132 (1-477)
                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and Encoded Human Proteins
                                                                                                                                                                                                                                         ი
                                                                                                                                                                                                                                         ö
                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                            477
116
0
2
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217
```

```
Sequence 1, Application US/08899241A

Patent No. 6322995

GENERAL INFORMATION:

APPLICANT: Hohmann, Hans-Peter

APPLICANT: Hohmann, Hans-Peter

APPLICANT: Schurter, Malching

APPLICANT: Van Loon, Adolphus

CIRCENTION INFORMATION INFORMATION Production

FILE REFERENCE: Improved Riboflavin Production

FILE REFERENCE: Improved Riboflavin Production

FILE REFERENCE: IMPROVED RIBOFLAVIN Production

FULLE REFERENCE: 1997-07-23

EARLIER FILING DATE: 1997-07-23

EARLIER FILING DATE: 1996-07-24

NUMBER OF SEQ ID NOS: 252

SOFTWARE: PATENTIN VEY. 2.0

SEQ ID NO 1

SEQ ID NO 1

LENGTH: 5567

TYPE: DNA

ORGANISM: Bacillus subtilis

US-08-899-241-1
                밁
                                     S
                                                                          밁
                                                                                                 5
                                                                                                                                       밁
                                                                                                                                                                  Ś
                                                                                                                                                                                                                             ş
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                               US-10-785-135-2 (1-339) x US-08-899-241-1 (1-5567)
                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-899-241-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                              8
⊙
::
                                                                                                                                                                                                     1179
                                                                            1299
                                                                                                                                          1239
                 1359
                                                                                                                                                                      107
                                                                                                           127
                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              184
                                                                                                                                                                                                                                  89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        μ
                IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGlu------
                                                                                                                                          GAAGCTCATGCAGAAGTTCATGCCATACCATATGGCTGGAGCACATGCAGAGGGTGCCGAC
                                                                                                                                                                      AspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsnCysAsp 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHis 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer 20
                                                                            ATTTACGTTACACTCGAACCGTGCAGCCATTACGGAAAAACACCGCCATGTGCAGAATTG
                                                                                                        LeuTyrPheSerArgLysProCysSer-----
                                                                                                                                                                                                     GGCGCTGTTGTCGTAAAGGACGGACAAATTGTCGGAATGGGCGCCCATTTAAAAATATGGT 123
                                                                                                                                                                                                                                GlyLeuValValValLysAsnMetLysIleValGlyLeu-----HisCysSerSerGlu 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCARATTGCTCTTATTAAACAT 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAAGACAGGTAAAGAGAACTGGTCTTNTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLysArgGlnValLysArgThrGlyLeuValValLysAsnMetLysIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGAAAGAAGCTGGGCAGATGSAAAATCTGGAGAGCGCGAGGGCCGGGCGGTCAGTCAGC
                                                                                                                                                                                                                                                                                              0.00119
119.50
48.6%
30.8%
6.8%
                                                                                                                                                                                                                                                                                              Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                         -----AlaCysLeuLysMet
                                                                                                                                                                                                                                                                                              5567
33
19
40
15
                                                                            1358
                                                                                                                                          1298
                 1418
                                               157
                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                               S
                                                                                                                                                                                   δ
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                           US-09-902-540-986
                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-785-135-2 (1-339) x US-09-902-540-9217 (1-1092)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
US-09-'902-540-9217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Myxococcus
US-09-902-540-9217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
APPLICANT: Goldman,
APPLICANT: Hinkle,
APPLICANT: Slater,
APPLICANT: Wiegand,
                                                          Sequence 986, Application Patent No. 6833447 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9217, Application Patent No. 6833447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGTH: 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1479
                                                                                                                                                         349
                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                              127
                                                                                                                                                                                                                                                                                                                                                                                                                                            107
                                                                                                                                                                                    181 LysSerAsnSerArgAlaHisValCysValLeu 191
                                                                                                                                                         CGG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlyLeuValValValLysAsnMetLysIleVal-----
                Hinkle,
Slater,
                                                                                                                                                                                                                                                                                                                                                                           LeuTyrPheSerArgLysProCysSer----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĠĊAGACCAGGCGĠÁĠÁĠĠĊŤĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaLysAlaValGluArgLeu 180
 Wiegand,
, Barry S.
, Gregory
, Steven C
d, Roger C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.00014
117.50
45.9%
31.5%
6.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             xanthus
                                                                                                                                                         CGCGCCGGCCTCAAGGTCCTC
                                                                                            US/09902540
00,4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09902540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative:
```

```
GENERAL INFORMATION:

APPLICANT: Goldman, Barry S.

APPLICANT: Hinkle, Gregory J.

APPLICANT: Slater, Steven C.

APPLICANT: Wiegand, Roger C.

TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Use

FILE REFERENCE: 38-10(15849) B

CURRENT APPLICATION NUMBER: US/09/902,540

CURRENT FILING DATE: 2001-07-10

PRIOR APPLICATION NUMBER: 60/217,883

PRIOR APPLICATION NUMBER: 60/217,883

PRIOR FILING DATE: 2000-07-10

PRIOR FILING DATE: 2000-07-10

PRIOR APPLICATION NUMBER: 60/217,883

FRIOR FILING DATE: 2000-07-10

JUMBER OF SEQ ID NOS: 16825

SEQ ID NO 9217
                                                                                                                                                                     141 IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                                             205 CTCTACACCACGCTGGAGCCGTGCGACCACTACGGGCGTACCCCGGCGTGCAGCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                          85 GGCGCCGTGCTGGTGAAGGGCGGGCGCGCCATCATCGCCCGCGGCTACCAAGAAGGCGGGC 144
                                                      LeuThrGluAlaSerSerGluAspAlaĻysLeuAspAlaĻysAlaValGluArgLeu 180
                                                                                                                             ATCATCGAGGCGGCGTCCGGCGCGTCATCTGCGCGTCGGCGGACCCC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspleuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsnCysAsp 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGGAAGAGGGÄTCAĞCATGATGAAAĞAAĞCTGGCATTGAGGTAAGGGAAGGCATCCTG 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAsp 173
---AACCCGAAGGTGAGCGGCAAGGGCGTGTCGCGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -GlyLeuHisCysSerSerGlu 106
                                                                                                                                                                                                                                                                                                                             ----AlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thereof
                                                                                                                                                                                                160
                                                                                                                                                                                                                                                             264
                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                             204
   348
                                                                                                                                312
```

```
Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , NAME/KEY: unsure
; LOCATION: (1)..(132
; OTHER INFORMATION:
US-09-902-540-986
                                                                                                                                                                                                                US-09-710-279-1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-785-135-2 (1-339) x US-09-902-540-986 (1-13234)
                                                                                                                                                          Sequence 1625, Application Patent No. 6703492 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Myxococcus xanthus Genome FILE REFERENCE: 38-10(15849)B
CURRENT APPLICATION UNMBER: US/09/902,540
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION UNMBER: 60/217,883
PRIOR FILING DATE: 2000-07-10
NUMBER OF SEQ ID NOS: 16825
SEQ ID NO 986
LENGTH: 13234
       APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS.
FILE REPERENCE: PUJ480US
CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR PILICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Myxococcus xanthus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match:
                                                                                                                                                                                                                                                                       836
                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        513
                                                                                                                                                                                                                                                                                                                                                                            159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CyshspleuTyrPheSerArgLysProCysSer----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsn 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCGTGGGCGCCGTGCTGAAGGGCGGGCGCATCATCGCCCGCGGCTACCACAAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATGCGCATCGCGCTGGAGGAAGCCGCCAAGGGC-CTGGGCCGCACCAGCCCCAACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGACACGGGCGCCCCGGGCGAAGCGAGCGGCGGACTTCGACCGGGCGGTGGCTGAGTTCT
                                                                                                                                                                                                                                                                       CGGATGCGG---
                                                                                                                                                                                                                                                                                                     ArgLeuLysSerAsnSerArgAlaHisValCysValLeu 191
                                                                                                                                                                                                                                                                                                                                                                            SerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCATCATCGAGGCGGCGTCCGGCGCGTCATCTGCGCGTCGGCGGACCCC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                LysMetIleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIle 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGGACCTCTACACCACGCTGGAGCCGTGCGACCACTACGGGCGTACCCCGGCGTGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGGGCAGCGCGAGCTCGAGGTCGTCGCGCTGGAGGCCGCCGGTGCGCGCGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysHisGlyProLeuGlyAspAsnGluGluArgThr-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -GlyLeuValValValLysAsnMetLysIleVal-----GlyLeuHisCysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (13234)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unsure at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.00908
117.50
41.8%
29.4%
6.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgValSerThrAspLysArgGlnValLysArgThr-------
                                                                                                                                                                                               US/09710279
                                                                                                                                                                                                                                                                       CGCGCCGGCCTCAAGGTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       locations
                                                                                                                                                                                                                                                                                                                                           ----AACCCGAAGGTGAGCGGCAAGGGCGTGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13234
45
19
48
42
                                                                                                                                                                                                                                                                       865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----АlaСұя́Leu 138
                                                                                                                            AND PROTEINS
                                                                                                                                                                                                                                                                                                                                              835
                                                                                                                                                                                                                                                                                                                                                                                                                805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                       RESULT 11
US-09-710-279-1963
                                                                                                                            밁
                                                                                                                                                          á
                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-785-135-2 (1-339) x US-09-710-279-1625 (1-1032)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
OTHER INFORMATION:
US-09-710-279-1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Sequence 1963, Application Patent No. 6703492
GENERAL INFORMATION:
APPLICANT: KIMMERLY, WILLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 1625
LENGTH: 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                          670 AMAGATACTGCATCGGAGATATGGATTT
                                                                                                                                                               293
                                                                                                                                                                                                 610
                                                                                                                                                                                                                                                                                                                                            505 GAAGATGTTTATC-----AATTAAGACATGAGCATGATGCAGTTATTA----CTGGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                  445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127 LeuTyrPheSerArgLysProCysSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107
                                                                                                                                                                                                                                 275 nMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSerSerValProAsn------
                                                                                                                                                                                                                                                                                                         260 uGluAsnLeu----
                                                                                                                                                                                                                                                                                                                                                                              240 uMetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThrIleGlyLe 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64 GGATCCGTTGTTGAAAAACGGTAGGATTGTAGGTTTAGGTGCACATTTAAAAAAAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89 GlyLeuValValLysAsnMetLysIleValGlyLeu-----HisCysSerSerGlu 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuThrGluAlaSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                 CATCCGATTCGAGTTATTCTTTCTAAGAAAGGTCAACTCGATTTTAATCAACAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                  ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGlu-ArgIleLysGluTyrGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTTTACTGCTAAAAGAAACGAAGTTCCAGAAGTAACTGTAAAGGTCTCATCTAGTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAATATAATGAAAATGCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCATTGAAGCGGGCATATCTAAGGTCATCTATGCTGTTAAAGAT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATACGTTTCATTAGAACCTTGCACACACCATGGTTCAACACCACCTTGTGTGCATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAAACATGCCGAAGTACAAGCTATTGAAATGGCAGGTTTAAATACCCAAGGTGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsnCysAsp
                                                                                                                                                              ------PheLysHisPheGlyPhe 298
                                                                                                                                                                                                                                                                       AGAACCATTGAAGCAGACAATCCATTGTATACAACCAGGGTTC-----CTGATGGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTACTTTAGTAAGGAGGCGACGAGATTCTGAGAGAAGCTGGTATAGAGGTTGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.000549
112.50
41.3%
23.9%
6.4%
   WILLIAM JOHN
                                                      US/09710279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acid
                                                                                                                                                                                                                                                                                                         -----CysGluAsnProTyrPheSerAsnLeuArgGlnAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of Artificial Sequence: synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032
55
40
97
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----AlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -GCTGCATTATACCGTGAC 384
```

504

444 220 348 180

200

160

288

140

183

243

123

669

292 609 275

555

S 밁 8

S 용 Ś

뭐 á В Ś В 밁 Ś

밁

```
FILE REFERENCE: PUJ480US
CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR PILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOPTWARE: PATCHIN Ver. 2.1
SEQ ID NO 1963
LENGTH: 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-785-135-2 (1-339) x US-09-710-279-1963 (1-1032)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; FEATURE:
; OTHER INFORMATION: Description of Artific
; OTHER INFORMATION: nucleic acid sequence
US-09-710-279-1963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTACTTTAGTAAGTAAGGGTGACGAGATTCTGAGAGAAGCTGGTATAGAGGTTGAATTT 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuTyrPheSerArgLysProCysSer------AlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGATCCGTTGTTAAAAACGGTAGGATTGTAGGTTTAGGTGCACATTTAAAAAAGGGA 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyLeuValValValLy8AsnMetLy8IleValGlyLeu-----HisCy8SerSerGlu
                                                                                                             nMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSerSerValProAsn------
                                                                                                                                                         AGAACCATTGAAGCAGACAATCCATTGTATACAACCAGGGTTC-----CTGATGGAAAG
                                                                                                                                                                                                                                                                                       uMetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThrIleGlyLe 260
                                                                                                                                                                                                                                                                                                                                   GATGGTAAACAAGCAACAGACTTTAATĠÁÁAGTÁÁĠTGGATAACAAACAÁĠAAGTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTTTACTGCTAAAAAGAAACGAAGTTCCAGAAGTAACTGTAAAGGTCTCATCTAGTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAAGCGGGCATATCTAAGGTCATCTATGCTGTTAAAGAT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATACGTTTCATTAGAACCTTGCACACACCATGGTTCAACACCACCTTGTGTGCATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATAAACATGCCGAAGTACAAGCTATTGAAATGGCAGGTTTAAATACCCAAGGTGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsnCysAsp
                                                                 CATCCGATTCGAGTTATTCTTTCTAAGAAAGGTCAACTCGATTTTAATCAACAAATATTT
                                                                                                                                                                                                                                                                                                                                                                             ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGlu-ArgIleLysGluTyrGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu 160
                    -PheLysHisPheGlyPhe 298
                                                                                                                                                                                                                                             -- AATTAAGACATGAGCATGATGCAGTTATTA---CTGGGCGT
                                                                                                                                                                                               -----CysGluAsnProTyrPheSerAsnLeuArgGlnAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GCTGCATTATACCGTGAC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1032
55
40
97
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic
                                                                 669
                                                                                                                                                                                                 275
                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                   504
                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                            444
                                                                                                                                                       609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2313, Application US/09134001C
Patent No. 6380370
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO AC
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOST
FILE REFERENCE: GTC-007
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
                                  δ
                                                                                   밁
                                                                                                                      á
                                                                                                                                                                          밁
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-785-135-2 (1-339) x US-09-134-001C-2313 (1-1053)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-134-001C-2313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
US-09-134-001C-2313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 2313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Staphylococcus epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 1053
                                                                                                                                                                            349
                                         214
                                                                                                                                  194
                                                                                                                                                                                                                                                                                                              154
                                                                                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102
304 AAAGAT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670 AAAGATACTGCATCGGAGATATGGATTT 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 GTAGATTTATGGATGATGCTATTC------AATTAGCAAAAATG-GTAAATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42
                                       GlnLysIleThrLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAsp ::: ||| ::: |||
                                                                                        ---GCTGCATTATACCGTGACTTTTTTACTGCTAAAAGAAACGAAGTTCCAGAAGTAACT
                                                                                                                                                                                                                      AlaLysAlaValGluArgLeuLysSerAspSerArgAlaHisValCysValLeuLeuGln 193
                                                                                                                                                                                                                                                                                                              AlaAspProGluIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAsp 173
                                                                                                                                                                                                                                                                                                                                                        ACGCCACCTTGTGGGATAAAATCATTGAAGCGGGCATATCTAAGGTCATCTATGCTGTT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgGlnValLysArgThrGlyLeuValValLysAsnMetLysIleValGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CARACAGGTGTTAATCCACCAGTAGGATCC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsn
                                                                                                                                ProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIle
                                                                                                                                                                            GCTGGTATAGAGGTTGAATTTCAATATAATGAAAATGCA-
                                                                                                                                                                                                                                                                                                                                                                                                  -----AlaCysLeuLysMetIleValAsnAlaGlyValAsnArgIleSerTyrTrpPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAAATACCCAAGGTGCTACCATATÁCGTTŤCÁTTAGAACCTŤGTACACACCATGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGCACATTTAAAAAAAGGGAGATAAACATGCCGAAGTACAGGCTATTGAAATGGCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----HisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.000568
112.50
39.0%
23.1%
6.4%
                                                                                                                                                                                                                                                                  ----ACTACTTAGTAAGTAAGGGTGACGAGATTCTGAGAGAA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----GTTGTTGTTAAAAACGGTAGGATTGTAGGTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AMINO ACID SEQUENCES RELATING TO DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STAPHYLOCOCCUS
                                                                                        444
                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                                                                                         153
                                                                                                                                                                              387
                                                                                                                                                                                                                                                                                                                                                                                                                                                   243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90
```

S 밁 ઈ 밁 5 밁 S 밁 8

293 610 556 260

> uGluAsnLeu----GAAGATGTTTATC----

240 445 221 385 201 349 181 289 161 244 141 184 127 124 107 64 89

밁 Ś 밁 \$ 밁

CAATATAATGAAAATGCA----

S 밁 8 S

멍 S 밁 Query Match: DB:

Best Local Similarity:

0.000549 112.50 41.3% 23.9% 6.4%

Percent Similarity:

Alignment Scores:

No.:

ORGANISM: Artificial Sequence

TYPE: DNA

밁 ঠ

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
밁
                              Ş
                                                                     밁
                                                                                                   ठ
                                                                                                                                       Дb
                                                                                                                                                                         á
                                                                                                                                                                                                                문
                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence; OTHER INFORMATION: nucleic acid sequence US-09-710-279-3688
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-785-135-2 (1-339) x US-09-710-279-3688 (1-3227)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-710-279-3688/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3688, Application US/09710279.

Sequence 3688, Application US/09710279.

Patent No. 6703492

GENERAL INFORMATION:

APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
FILE REFERENCE: PU3480US
CURRENT ELLING DATE: 2000-11-09
CURRENT FILING DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOFTMANDE DESCRIPTO VOTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3688
LENGTH: 3227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.:
1696
                                                                                                                                                                                                                                                                                                                                                              1926
                                                                                                                                             1816
                                                                                                                                                                                                                                                                                          1879
                                                                                                                                                                                                                  1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    559
                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                              42 LeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsn
                                                                                                                                                                                                                                           LysArgGlnValLysArgThrGlyLeuValValValLysAsnMetLysIleValGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGTTATTA---CTGGGCGTAGAACCATTGAAGCAGACAATCCATTGTATACAACCAGG
                                                                                                                                               GGTGCACATTTAAAAAAGGGAGATAAACATGCCGAAGTACAAGCTATTGAAATGGCAGGT
                                                                                                                                                                                                                                                                                      CAAACAGGTGTTAATCCACCAGTAGGATCC----
                                                                                                                                                                                                                                                                                                                        GluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAsp
                                                                                                                                                                                                                                                                                                                                                            GTAGATTTATGGATGATGCTATTC------AACTAGCAAAAATG-GTAAATGGA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATTTTAATCAACAAATATTTAAAGATACTGCATCGGAGATATGGATTT 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAACAAACAAAGAAGTTAAAGAAGATGTTTATC----AATTAAGACATGAGCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glu-ArgIleLysGluTyrGluMetLeuPheLeuValSerAspGluGluMetHisLysGl
ACACCACCTTGTGTGCATAAAATCATTGAAGCGGGCATATCTAAGGTCATCTATGCTGTT 1637
                                                                       TTAAATACCCAAGGTGCTACCATATÁCGTTŤĆÁTTAGAAĆČŤŤĠĆACACACCATGGTTCA
                                                                                                         SerArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSer------
                                                                                                                                                                                                                ------GTTGTTGAAAAACGGTAGGATTGTAGGTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rSerValProAsn----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTC-----CTGATGGAAAGCATCCGATTCGAGTTATTCTTTCTAAGAAAGGTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rPheSerAsnLeuArgGlnAsnMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nIleLeuMetThrIleGlyLeuGluAsnLeu-----
                                 -----AlaCysLeuLysMetIleValAsnAlaGlyValAsnArgIleSerTyrTrpPro 153
                                                                                                                                                                             ----HisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGly 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.0037
112.50
39.0%
23.1%
6.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         --PheLysHisPheGlyPhe 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3227
64
44
108
62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -CysGluAsnProTy
                                                                                                                                                                                                                                                    101
                                                                         1697
                                                                                                                                               1757
                                                                                                                                                                                                                    1817
                                                                                                             135
                                                                                                                                                                                                                                                                                          1850
                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
   맑
                                 Ş
                                                                         밁
                                                                                                         5
                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Description of Artifi
OTHER INFORMATION: nucleic acid sequence
US-09-710-279-3387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
US-09-710-279-3387/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                               US-10-785-135-2
                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                          Alignment Scoreș:
                                                                                                                                                                                                                                                          score:
                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 3387
LENGTH: 3618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No. 6703492
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3387, Application US/09710279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS FILE REFERENCE: PUJ480US CURRENT APPLICATION NUMBER: US/09/710,279 CURRENT FILING DATE: 2000-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/164,258 PRIOR FILING DATE: 1999-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: KIMMERLY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 4472
                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1636
   2662 CAMACAGGIGITAATCCACCAGTAGGATCC---
                                                                         2709 GTAGATTTATGGATGATGCTATTC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1270 GATTTTAATCÄÄCAAATATTTAAAGATACTGCATCGGAGATATGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            154 AlaAspProGluIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAsp
                                62 GluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAsp
                                                                                                             42 LeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glu-ArgIleLysGluTyrGluMetLeuPheLeuValSerAspGluGluMetHisLysGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGTTATTA---CTGGGCGTAGAACCATTGAAGCAGACAATCCATTGTATACAACCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGAT-----ACTACTTTAGTAAGTAAGGGTGACGAGATTCTGAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rSerValProAsn-------PheLysHisPheGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rPheSerAsnLeuArgGlnAsnMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nIleLeuMetThrIleGlyLeuGluAsnLeu-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATAACAAACAAAGAAGTTAAAGAAGATGTTTATC----AATTAAGACATGAGCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnLysIleThrLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGln 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---GCTGCATTATACCGTGACTTTTTTACTGCTAAAAGAAACGAAGTTCCAGAAGTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĠĊTGGTATAGAGGTTGAATTTCAATATAATGAAAATĠĊA-----;-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGln
                                                                                                                                               (1-339) x US-09-710-279-3387 (1-3618)
                                                                                                                                                                                0.00448
112.50
39.0%
23.1%
6.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WILLIAM JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĊŢĠAŢĠĠAĀĀĠĊAŢĊĊĠAŢŢĊĠĀĠŢŢĀŢŢĊŢŤĀĀĠĀĀĀĠĞŢĊĀĀĊŢĊ
                                                                                                                                                                                                                                                                                                                                                                 of Artificial Sequence:
                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                       Conservative:
                                                                             -AACTAGCAAAAATG-GTAAATGGA 2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEIC ACIDS
                                                                                                                                                                                    3618
64
44
108
62
                                                                                                                                                                                                                                                                                                                                                                   synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -CysGluAsnProTy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROTEINS
```

2633

13

1325 268 1382 253

288

1271

1496 213

1436

193

1592 173

```
Sequence 1, Application US/09557884
Patent No. 6506581
Patent No. 6506581
GENERAL INFORMATION:
GENERAL INFORMATION:
The Nucleotide sequence of
the Haemophilus influenzae Rd
Thereof, and Uses Thereof
                 COMPUTER READABLE FORM:
MEDIUM TYPE: 3 1/2 inch diskette
COMPUTER: Dell Pentium
OPERATING SYSTEM: MS DOS v6.22
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2164 GCAGTTATTA----CTGGGCGTAGAACCATTGAAGCAGACAATCCATTGTATACAACCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2053 GATTTTAATCAACAAATATTTAAAGATACTGCATCGGAGATATGGATTT 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 288 rSerValProAsn-------PheLysHisPheGlyPhe 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       154 AlaAspProGluIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTC----CTGATGGAAAGCATCCGATTCGAGTTATTCTTATGAAGAAAGGTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rPheSerAsnLeuArgGlnAsnMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSe 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAACAAACAAAGAAGTTAAAGAAGATGTTTATC-----AATTAAGACATGAGCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGln 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACACCACCTIGIGCATAAAATCAITGAAGCGGGCATATCTAAGGTCATCTAIGCIGIT 2420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgGlnValLysArgThrGlyLeuValValLysAsnMetLysIleValGlyLeu
                                                                                                                                                                                           STATE: MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnLysIleThrLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGln 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGCACATTTAAAAAAGGGAGATAAACATGCCGAAGTACAAGCTATTGAAATGGCAGGT
APPLICATION NUMBER: US/09/557,884
                                                                                                                                                 ZIP: 20850
                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                           CITY: Rockville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glu-ArgIleLysGluTyrGluMetLeuPheLeuValSerAsnGluGluMetHisLysGl 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---GCTGCATTATACCGTGACTTTTTTACTGCTAAAAGAAACGAAGTTCCAGAAGTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGGTATAGAGGTTGAATTCAATATAATGAAAATGCA-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAMATACCCAAGGTGCTACCATATACGTTTCATTAGAACCTTGCACACCACCATGGTTCA 2480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSer------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----HisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGly 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----AlaCysLeuLysMetIleValAsnAlaGlyValAsnArgIleSerTyrTrpPro 153
                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----GTTGTTGTTAAAAACGGTAGGATTGTAGGTTTA
                                                                                                                                                                                                                                                                                                                                             Genome,
                                                                                                                                                                                                                                                                                                                                           Fragments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                    S
                                                              밁
                                                                                                    S
                                                                                                                                                 밁
                                                                                                                                                                                       S
                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-785-135-2 (1-339) x US-09-557-884-1 (1-1830121)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; SEQUENCE DESCRIPTION: SEQ US-09-557-884-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1830121 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                            1003339 ---AATCATCCGCACTTTATCTACTTCCACAACAGTCATTGCAGATGATCCAAGCCTTA 1003395
                                                                                                                                               1003290 TGGATTACGGGCCCAGATGCTCGGTTCGGACG--TACAAAAAATGCGAGCAA------
                                                                                                                                                                                                                                    1003230
                                                                                                                                                                                                                                                                                                                         1003194
                                                                                                                                                                                                                                                                                                                                                                                                            1003164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1003104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1003044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1002984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1002924 CAACCTCATGCTGAACGCGTTGCCTTAGCTCAAGCTGGTGAAAATGCTAAAGGAGCAACC 1002983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1002864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Michelle S. Marks
REGISTRATION NUMBER: 41,971
REFERENCE/DOCKET NUMBER: PB
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 25-Apr-2000
CLASSIFICATION: <Unknown
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                              214
                                                                                                                                                                                                                                                                                                                                                                                                                                                      174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   194
                      256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127 LeuTyrPheSerArgLysProCysSer------AlaCysLeuLysMet 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGlu-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTACGTCACCTTAGAGCCTTGCGCTCATTATGGTCGCACCACCACCTTGTGCATTAGGA 1003043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyLeuValValLygAgnMetLygIleVal-----GlyLeuHisCysSerSerGlu 106
                    MetThrIleGlyLeuGluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsn
                                                                                                                                                                                                                                                                            Gln---LysIleThrLysThrLeu-----
                                                                                                                                                                                                                                                                                                                                                                                                            AACGATCAAGCGGAAAAAATAAATAAAGGT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGAAAAGGTTTGAAAATGTTGTCTGATGCCGGTATCGAAAGTACGGTGAATTTATTG 1003163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLysAsnCysAsp
                                                                                                      LysGluTyrGluMetLeuPheLeuValSerAsnGluGluMetHisLys---GlnIleLeu 255
                                                                                                                                                                                                                                  CAACTAAAACTTGCCATGAGTTTAGATGGACGAACTGCAATGGCAAGTGGAGAAAGTAAA 1003289
                                                                                                                                                                                                                                                                                                                                                                 ProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGln 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----IleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAsp 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAATTGAGGCGGGCGTAGTGAAAGTCATTGCGGCTATGCAAGATCCAAAATCCTCAAGTC 1003103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 08/476,102 FILING DATE: JUN-5-1995
                                                                                                                                                                                       -----ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
110.00
37.8%
22.1%
6.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <Unknown>
                                                                                                                                                                                                                                                                                                                         -----TTTTTAAAACGAATGCGTCAAGGTATGCCTTTTGTT 1003229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PB186P3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35
77
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1830121
49
275
                                                                                                                                                                                              236
                                                                                                                                                                                                                                                                                                                                                                   213
                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                              1003193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      126
                                                                                                                                                   1003338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
```

RESULT 15 US-09-557-884-1

밁 5 밁 5 8 ş

2107

S 밁 Ş 밁 5 밁

214

2335

2374

194

174

ð 8 á 밁 S 밁 5 밁 S

2479

2539

120

136

2632

82

102

밁

2278

2218

Sequence Sequence Sequence Sequence

7425, Appl 82, Appl 17, Appl 17, Appl 17, Appl 13635, Ap 43967, Ap 43967, Ap 13546, Ap 13544, Ap 41873, Ap

Sequence

295, Appli 4, Appli 2, Appli

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
   number of
                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
   109
107.5
105
105
98.5
98.5
98.5
98.5
97.5
97.5
97.5
97.5
                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                               1755
607
586
305
305
109
109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein search, using sw
                                                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                100.0
34.6
17.4
6.2
6.2
6.2
6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        650591 seqs, 87530628 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-785-135-2
1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               September 16, 2006, 19:16:22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISSUED PATENTS AA:*

| KEMC Celerra_SIDS3/ptodata/2/iaa/5_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/6_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/7_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/RI_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/PCTUS_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/RI_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/RI_COMB.pep:*
| EMC_Celerra_SIDS3/ptodata/2/iaa/RI_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MKEAGQMQNLESARAGRSVS.....RHCMVQARLLAYRTGELHRS
   GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd
   Gapext 0
US 09-802-371-2
US-09-513-990C-8136
US-09-513-990C-8136
US-09-521-976-9992
US-09-973-278-177
US-09-277-357-1626
US-09-710-279-1626
US-09-710-279-1626
US-09-134-001C-3150
US-09-134-001C-3746
US-09-273-357-347
US-09-273-357-347
US-09-543-681A-6274
US-09-543-681A-6274
US-09-543-681A-6332
US-09-543-681A-6332
US-09-543-681A-6332
US-09-543-681A-6332
US-09-543-681A-6333
US-08-99-595-3
US-09-543-681A-6333
US-08-99-595-3
US-09-543-681A-6333
US-08-978-456-2
US-09-543-681A-6333
US-08-978-456-2
US-09-369-700-2
US-09-370-975B-14
US-08-370-975B-14
US-09-134-001C-2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           summaries
                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 ; Search time 50 Seconds (without alignments)
593.458 Million cell update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 650591
Sequence 2, Appli
Sequence 3992, App
Sequence 177, App
Sequence 177, App
Sequence 1626, Ap
Sequence 1626, Ap
Sequence 1626, Ap
Sequence 5150, App
Sequence 217, App
Sequence 317, App
Sequence 317, App
Sequence 3746, Ap
Sequence 26732, Ap
Sequence 26732, Ap
Sequence 4536, App
Sequence 4536, Appli
Sequence 45323, Ap
Sequence 45323, Appli
Sequence 14, Appli
Sequence 78, Appli
Sequence 79, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cell updates/sec
                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Reyers, Rachel
APPLICANT: Reyers, Rachel
TITLE OF INVENTION: 26934, A No. 6723533el Cytidine Dea
TITLE OF INVENTION: 26934, A No. 6723533el Cytidine Dea
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILLING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 339
TYPE: PRT
ORGANISM: Homo sapiens
US-09-802-371-2
                      8
                                                    뮍
                                                                    S
                                                                                             Вb
                                                                                                                        S
                                                                                                                                                     ₽
                                                                                                                                                                        5
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-802-371-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 339; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/09802371 Patent No. 6723533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                            241
                                                                                                     181
                                                                                                                              181
                                                                                                                                                       121
                                                                                                                                                                              121
                                                                                                                                                                                                        61
                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                          1 MKEAGOMONLESARAGRSVSTOTGSMTGOIPRLSKVNLFTLLSLWMELFPAEAOROKSOK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEEGKHGPLGDNEERTRVSTDKRQVKRTGLVVVKNMKIVGLHCSSEDLHAGQIALIKHGS
                                                                                                                                                                                                                      NEEGKHGPLGDNEERTRVSTDKRQVKRTGLVVVKNMKI VGLHCSSEDLHAGQIALI KHGS
                                                    RLKNCDLYFSRKDCSACLKMIVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERL
                   SNPEQINEIHNQSLPQEIARHCMVQARLLAYRTGELHRS 339
                                                                                                                                                                                                                                                         MKEAGQMQNLESARAGRSVSTQTGSMTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQK
                                                                                                      KSNSRAHVCVLLQPLVCYMVQFVEETSYKCDFIQKITKTLPDANTDFYYECKQERIKEYE
                                                                                                                   KSNSRAHVCVLLQPLVCYMVQFVEETSYKCDFIQKITKTLPDANTDFYYECKQERIKEYE
                                                                                                                                                       RLKNCDLYFSRKPCSACLKMIVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŀ,
                                                                                                                                                                                                                                                                                                        100.0%; Score 1755; DB 2; llarity 100.0%; Pred. No. 3.4e-189; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             συνοσοσοσοσοσοσοσοσοσο
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            915
956
390
956
154
407
139
1139
1139
11706
11706
11706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-949-016-7425
US-09-914-259-16
US-10-162-335-82
US-09-914-259-17
US-09-134-001C-3635
US-09-107-532A-5675
US-09-270-767-43967
US-09-270-767-41873
US-09-270-767-41873
US-09-270-767-41873
US-09-438-185A-295
US-08-459-586-2
US-08-516-859A-2
US-09-528-706-2
US-09-528-706-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Deaminase-Like
```

0,

Gaps

60

300

300

240

180

```
8
                                                           ; OTHER INFORMATION: US-09-621-976-3992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: UNSURE

COCATION: 121

OTHER INFORMATION: Xaa=Gly or Ser
US-09-513-999C-8136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-621-976-3992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-513-999C-8136
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 3992
LENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patent.pm
SEQ ID NO 8136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8136, Application US/09513999C Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3992, Application US/09621976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 663906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
                                                                                                                                                                                    NAME/KEY: SIGNAL
LOCATION: -50..-1
NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and
FILE REFERENCE: GENSET.054PR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins atent No. 6783961
FILE REFERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dumas Milne APPLICANT: Duclert, A. APPLICANT: Giordano, G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dumas Milne Edwards, J.B. APPLICANT: Jobert, S.
                                                                                                                           NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                 OTHER INFORMATION:
                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                CYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 NEEGKHGPLGDNEERTRVSTDKRQVKRTGLVVVKNMKIVGLHCSSEDLHAGQIALIKHGS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MKEAGOMONLESARAGRSVSTOTGSMTGQIPRLSKVNLFTLLSLWMELFPAEAQROKSOK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEEGKHGPLGDNEERTRVSTDKRQVKRTGLVVVKNMKIVGLHCSSEDLHAGQIALIKHGS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MKEAGQMQNLESARAGRSVSTQTGSMTGQ1PRLSKVNLFTLLSLWMELFPAEAQRQKSQK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative .
                                                                                 Xaa = Leu,Met,Val
                                                                                                                                                 Xaa = Glu, Gln
  33.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34.6%; Score 607; DB 2;
100.0%; Pred. No. 2.7e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Edwards, J.B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
  Score 586; DB 2;
Pred. No. 6e-58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 121
                      Length 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-973-278-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 177, Ap
Patent No. 69243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT: Fischer et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1999-01-08
APPLICATION NUMBER: PCT/US98/13684
FILING DATE: 1998-07-07
                                                                                APPLICATION NUMBER: 60/055,953
                                                                                                                                                FILING DATE:
                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/052,732 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/227,357
                                                             FILING DATE: 1997-08-18
                                                                                                      FILING DATE: 1997-08-18
                                                                                                                          APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,926
                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NEBGKHGPLGDNEERTRVSTDKRQVKRTGLVVVKNMKIVGLHCSSEDLHAGQIALIKH 118
                                                                                                                                                                                                                                                                                                                  LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                        LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                         LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MKEAGOMONLESARAGRSVSTOTGSMTGOIPRLSKVNLFTLLSLWMELFPAEAOROKSOK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEEGKHGPLGDNEERTRVSTDKRQVKRTGLXVVKNMKIVGLHCSSEDLHAGQIALIKH 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MKEAGQMXNLESARAGRSVSTQTGSMTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09973278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                     1997-08-18
                                                                                                                                                1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                   1997-07-08
                                                                                                                                                                                       1997-08-
                                                                                                                                                                                                                                 1997-08-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1997-07-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123 Human Secreted Proteins
60/055,947
                                           60/055,950
                                                                                                                                                                    60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
```

```
; LOCATION: (69)
; OTHER INFORMATION: Xaa equals any US-09-973-278-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 164, App
Patent No. 634258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Ver.
SEQ ID NO 177
LENGTH: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -09-227-357-164
                                                                                                                                                                                                                                     EARLIER
EARLIER
                                                                                                                                                                                                                                                                               BARLIER
                                                                                                                                                                                                                                                                                                                       EARLIER
                                                                                                                                                                                                                                                                                                                                            BARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/227,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: 123 Human Secreted Proteins ILE REFERENCE: PZ010P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                   R FILING DATE: 1997-07-08
RR APPLICATION NUMBER: 60/052,803
RR FILING DATE: 1997-07-08
RR APPLICATION NUMBER: 60/052,732
RR FILING DATE: 1997-07-08
RR APPLICATION NUMBER: 60/051,931
RR APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/
FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/058,664
FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,684 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/051,926
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US98/13684 FILING DATE: 1998-07-07
                                                                         APPLICATION NUMBER: 60/051,932
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         164, Application US/09227357
                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,925 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/052,793
                                   FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26 MTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQKNEEGKHGPLGDNEERTRVSTDKRQ 84
                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQKNEEGKHGPLGDNEERTRVSTDKRQ 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-08-18
NUMBER: 60/051,918
                1997-07-08
                                                                                                                                                                                                                                                                                                                                            1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 305; DB 2;
Pred. No. 1.6e-26;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
```

```
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (78)
; OTHER INFORMATION: X
US-09-227-357-164
  밁
                                                                          Query Match
Best Local S
Matches 59
                                                                                                                                                                                                                                                                                                                                                                        EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 164
LENGTH: 78
                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens FEATURE: NAME/KEY: SITE LOCATION: (69)
OTHER INFORMATION: Xaa 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EARLIER APPLICATION NUMBER: 60/051,920
EARLIER FILING DATE: 1997-07-08
EARLIER APPLICATION NUMBER: 60/052,733
EARLIER FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,684
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60 FILING DATE: 1997-09-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,953
                    26 MTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQKNEEGKHGPLGDNEERTRVSTDKRQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/058,664 FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,964 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,947 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLACATION NUMBER: 60/052,795
                                                                          59:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-07-08
                                                                                               Similarity
MTGQIPRLSKVNLFTLLSLWMELFPABAQRQKSQKNEEGKHGPLGDNEERTRVSTDKRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE: 1997-08-18
                                                                          Conservative
                                                                                                                                                                            Xaa equals stop translation
                                                                                                                                                                                                                                                          Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1997-07-08
                                                                          17.4%; Score 305; DB 2;
100.0%; Pred. No. 1.6e-26;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/056,360
                                                                                                               Length 78
                                                                            Indels
                                                                            0
                                                                            Gaps
  59
                                                                            0
```

RESULT 6
US-09-710-279-3242
; Sequence 3242, Application
; Patent No. 6703492
; GENERAL INFORMATION:

US/09710279

```
밁
                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-710-279-1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LOCATION: (230)
; OTHER INFORMATION: variable amino acid
US-09-710-279-3242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 3242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1626, Application US/09710279 Patent No. 6703492
                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: synthetic OTHER INFORMATION: amino acid sequence :-09-710-279-1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                  SOFTWARE: Pat
SEQ ID NO 1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS
FILE REFERENCE: PUJ480US
CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 4472
                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/164,258 PRIOR FILING DATE: 1999-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: STAP
                                                                                                                                                                                                              TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MOD_RES
LOCATION: (230)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                               ENGTH: 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH: 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ocal Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 IVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNSRAHVCVLLQPLVCYMV 200
 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89 GLVVVKNMKIVGL--HCSSEDLHAGQIALIKHGSRLKNCDLYFSRKPCS-----ACLKM 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48;
                                                                                            Similarity
                                                                                                                                                                                                                                                                                                  PatentIn Ver.
                                   GLYVVKNMKIVGL--HCSSEDLHAGQIALIKHGSRLKNCDLYFSRKPCS-----ACLKM 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MTIGLENL-CENPYFSNLRQNMKDLILLLATVASSVPNFKH 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FFTAKRNEVPEVTVKVSSSLDGKQATDFNESKWITNKEVKEDVYQL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QFVEETSYKCDFIQKITKTLPDANTDFYYECK---QERIKE--YEMLFLVSNEEMHKQIL 255
 GSVVVKNGRIVGLGAHLKKGDKHAEVQAIEMAGLNTQGATIYVSLEPCTHHGSTPPCVHK 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VITGRRTIEADNPLYT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSVVVKNGRIVGLGAHLKKGDKHAEVQAIEMAGLNTQGATIYVSLEPCTHHGSTPPCVHK 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIEAGISKVIYAVKD-----TTLVSKGDEILREAGIEVEFQYNENA------AALYRD 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description of Artificial Sequence: synthetic amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STAPHYLOCOCCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35; Mismatches
                                                                        Score 109; DB 2;
Pred. No. 0.0026;
5; Mismatches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 109; DB 2;
Pred. No. 0.0013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TRVPDGKH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86;
                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 230;
                                                                                                           Length 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             204
                                                                                                                                                                                                                                                                                                                                                                                                                                      ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                      AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52;
                                                                            52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----RHEHDA 180
                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                            9
```

US-09-134-001C-5150

Sequence 5150, Application US/09134001C Patent No. 6380370

GENERAL INFORMATION: APPLICANT: Lynn Dou

APPLICANT: LYDD DOUGETTE-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND TITLE OF INVENTION: EPIDERMIDIS FOR FILE REFERENCE: GTC-007

AMINO ACID SEQUENCES RELATING DIAGNOSTICS AND THERAPEUTICS

3

STAPHYLOCOCCU

CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/064,964 PRIOR FILING DATE: 1997-11-08 PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14 NUMBER OF SEQ ID NOS: 5674

```
Ş
                                                                      밁
                                                                                                       Ş
                                                                                                                                                밁
                                                                                                                                                                                  8
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 4472
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1964
LENGTH: 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6703492
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1964,
                                                                                                                                                                                                                                                                                                                                                                              -09-710-279-1964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -09-710-279-1964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS
FILE REFERENCE: PUJ480US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/164,258 PRIOR FILING DATE: 1999-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: synthetic OTHER INFORMATION: amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence FEATURE:
                                                                        129
                                                                                                                                                                                    141 IVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNSRAHVCVLLQPLVCYMV 200
181
                                   256 MTIGLENL-CENPYFSNLRONMKDLILLLATVASSVPNFKH 295
                                                                                                           201 QFVEETSYKCDFIQKITKTLPDANTDFYYECK---QERIKE--YEMLFLVSNEEMHKQIL 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201 QFVEETSYKCDFIQKITKTLPDANTDFYYECK---QERIKE--YEMLFLVSNEEMHKQIL 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 IVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNSRAHVCVLLQPLVCYMV 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 VITGRRTIEADNPLYT-
                                                                                                                                                  82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82
                                                                                                                                                                                                                           22 GSVVVXNGRIVGLGAHLKKGDKHAEVQAIEMAGLNTQGATIYVSLEPCTHHGSTPPCVHK 81
                                                                                                                                                                                                                                                              89 GLYVVKNMKIVGL--HCSSEDLHAGQIALIKHGSRLKNCDLYFSRKPCS-----ACLKM 140
                                                                                                                                                                                                                                                                                                   48;
 VITGRRTIEADNPLYT---
                                                                        FFTAKRNEVPEVTVKVSSSLDGKQATDFNESKWITNKEVKEDVYQL-
                                                                                                                                                  IIEAGISKVIYAVKD----TTLVSKGDEILREAGIEVEFQYNENA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MTIGLENL-CENPYFSNLRQNMKDLILLLATVASSVPNFKH 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IIEAGISKVIYAVKO-----TTLVSKGDEILREAGIEVEFQYNENA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FFTAKRNEVPEVTVKVSSSLDGKQATDFNESKWITNKEVKEDVYQL
                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09710279
                                                                                                                                                                                                                                                                                                                     6.2%;
                                                                                                                                                                                                                                                                                                   Score 109; DB
Pred. No. 0.00
35; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---TRVPDGKH 204
                                                                                                                                                                                                                                                                                                                       DB 2;
   -TRVPDGKH 204
                                                                                                                                                                                                                                                                                                       96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEIC ACIDS AND PROTEINS
                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                       52;
                                                                          -RHEHDA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -AALYRD
                                                                                                                                                  -AALYRD 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RHEHDA 180
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128
                                                                                                                                                                                                                                                                                                     ۰۰
```

```
밁
                                                                           Ś
                                                                                                                     밁
                                                                                                                                                     S
                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; SEQ ID NO 5150
; LENGTH: 350
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-5150
                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: S. US-09-068-195-12
                                                                                                                                                                                                                                                                                                    Query Match
Best Local 8
                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 1998-07-29
EARLIER APPLICATION NUMBER: PCT/EP97/04755
EARLIER FILING DATE: 1997-08-20
EARLIER FILING DATE: 1997-08-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-068-195-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Salt-Inducible Promoter Derivable from a TITLE OF INVENTION: Bacterium, and Its Use in a Lacctic Acid TITLE OF INVENTION: Production of Desired Protein PILE REFERENCE: Sanders-60113/052227
CURRENT APPLICATION NUMBER: US/09/068,195B
CURRENT FILING DATE: 1998-07-29
                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER APPLICATION NUMBER: EP 96202444/4
EARLIER FILING DATE: 1996-09-05
NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patentin Ver. 2.0
EQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EARLIER APPLICATION NUMBER: EP 97200744/7
EARLIER FILING DATE: 1997-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ledeboer, Adri:
APPLICANT: Venema, Gerard
APPLICANT: Kok, Jan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sanders, Jan W.
                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 297
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
  250
                                        109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                     56
                                                                                                                                                           142 VNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNSRAHVCVLLQPLVCYMVQ 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 VITGRRTIBADNPLYT-------TRVPDGKH 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       256 MTIGLENL-CENPYFSNLRQNMKDLILLLATVASSVPNFKH 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201 QFVEETSYKCDFIQKITKTLPDANTDFYYECK---QERIKE--YEMLFLVSNEEMHKQIL 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141 IVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNSRAHVCVLLQPLVCYMV 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                           85 VKRTG--LVVVKNMKIVGL-HCSSEDLHAGQIALIKHGSRLKNCDLYFSRKPCSACLKMI 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89 GLVVVKNMKIVGL--HCSSEDLHAGQIALIKHGSRLKNCDLYFSRKPCS-----ACLKM 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48;
                                                                                                                                                                                                                                                                                   57; Conservative
                                                                                                                                                                                                                                                                             h 6.1%; Score 107.5; DB 2;
Similarity 21.0%; Pred. No. 0.003;
57; Conservative 52; Mismatches 125;
MHKQILMTIGLENLCENPYFSNLRQNMKDLILLLATVASSVPNFKHFGFYRSNPEQINEI 309
                                                                             FVEETSYKCDFIQKITKTLPDANTDFY-----YECKQERIKEYEM-LFLVSNEE
                                                                                                                                                                                                   VKSSGKILKIIRESKNMSLKEVAAGDISVAQLSRYERGISSLTVDSFYS-----CLR--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GSVVVKNGRIVGLGAHLKKGDKHAEVQAIEMAGLNTQGATIVVSLEPCTHHGSTPPCVDK
                                        FPEKKNYKLNTI-VIRATLTSCNPDYQVSKGDIEFLTDYLFSVEEWGRYELWLFTNSVNL 167
                                                                                                                     -NMSVSLAEFQ-----YVYHNYREADDVVLSQKLSEAQRENNIVKLESILAGSEAMAQE 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FFTAKRNEVPEVTVKVSSSLDGKQATDFNESKWITNKEVKEDVYQL-----RHEHDA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09068195B
                                                                                                                                                                                                                                                                                                                                                                                  gorodnii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adrianus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 109; DB 2;
Pred. No. 0.0026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                       DB 2; Length 297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Length 350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86;
                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                   37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lactic Acid
Bacterium fo
                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                             249
                                                                                                                                                                                                      55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                   μ
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 347,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER
EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER
EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: 123 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/227,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fischer et
                                                                                                                                                                                                SARLIER
                                                                                                                                                                                                                                                                                                EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 1999-01
                                                                                                                                                                                                                                                                                                                                                                                                                               ARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EARLIER APPLICATION NUMBER: PCT/US98/13684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168
                                                                                                                           APPLICATION NUMBER: 60/055,947
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310 HNQSLPQ-EIARHCMVQ--ARLLAYRTGELH 337
                                                                                                                                                                                                                                                                                                                            FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                  FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/052,793 FILING DATE: 1997-07-08
                              APPLICATION NUMBER: FILING DATE: 1997-0
                                                                                                FILING DATE:
                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,928 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051,916 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/051,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                               LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNTKIPETDLYDRVLIKYHKALYSYKVGNPH 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | : : | | : :::|| :| : :| | | : :| | | : :| | | | : :| | | | : :| | | | | : :| | | | | | : :| | | | | | : :| | | | | | | : :| | | | | : :| | | | | : :| | | | | : :| | | | : :| | | | : :| | : :| | | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | : :| | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PLICATION NUMBER: 60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09227357
                                                                                            1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                            1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1997-07-08
                                                                                                                                                                                                                                                                                                1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/055,723
60/055,684
                                                             60/056,360
                                                                                                                                                                                                                                                                 60/055,950
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
US-09-973-278-383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-227-357-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EARLIER FILING DATE: 1997-08-18
EARLIER APPLICATION NUMBER: 60/055,954
EARLIER APPLICATION NUMBER: 60/058,785
EARLIER APPLICATION NUMBER: 60/058,785
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER FILING DATE: 1997-09-12
EARLIER APPLICATION NUMBER: 60/058,660
EARLIER APPLICATION NUMBER: 60/058,660
EARLIER FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No. 692435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/227,357
PRIOR FILING DATE: 1999-01-08
PRIOR APPLICATION NUMBER: PCT/US98/13684
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/051,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BENERAL INFORMATION: APPLICANT: Fischer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: PZ010P2
CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 24
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,925
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,793
                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,932
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,803
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,732
                                                                      APPLICATION NUMBER: 60/051,920 FILING DATE: 1997-07-08
                                                                                                                      FILING DATE: 1997-07-08
                                                                                                                                               APPLICATION NUMBER: 60/051,918
                                                                                                                                                                      APPLICATION NUMBER: 60/051,930 FILING DATE: 1997-07-08
                         FILING DATE:
                                               APPLICATION NUMBER: 60/052,733
                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGOMONIESARAGRSVSTOTGS 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09973278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                           1997-07-08
                                                                                                                                                                                                                      1997-07-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6.0%; Score 105; DB 2;
100.0%; Pred. No. 9e-05;
tive 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
; TYPE: PRT ; ORGANISM: Enterococcus faecalis US-09-134-000C-3746
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
US-09-134-000C-3746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens US-09-973-278-383
                                                           APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FABCALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US/09/134,000C
CURRENT FILING DATE: 1998-08-13
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: Patentin version 3.1
SEQ ID NO 3746
LENGTH: 171
TYPE: DET
                                                                                                                                                                                                                                                                                                                                                  Patent No. 6617156
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver.
SEQ ID NO 383
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                           Sequence 3746, Application US/09134000C Patent No. 6617156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/058,660 PRIOR FILING DATE: 1997-09-12 PRIOR APPLICATION NUMBER: 60/058,661 PRIOR FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1997-0
NUMBER OF SEQ ID NOS: 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,984
PRIOR FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER: 60/055,723
OR FILING DATE: 1997-08-18
OR APPLICATION NUMBER: 60/055,948
OR FILING DATE: 1997-08-18
OR APPLICATION NUMBER: 60/055,949
OR FILING DATE: 1997-08-18
OR FILING DATE: 1997-08-18
OR APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.0%; Fig. 22; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/056,360 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/058,664 FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/058,785 FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,964
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,947
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,950 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/055,722
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,928
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 AGOMONIESARAGRSVSTOTGS 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGQMQNLESARAGRSVSTQTGS 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 105; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
```

```
RESULT 15
US-09-252-991A-26732
; Sequence 26732, Application US/09252991A
                                                                                                                      S
                                                                                                                                                               밁
                                                                                                                                                                                             5
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Proteus mirabilis US-09-543-681A-6274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
US-09-543-681A-6274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: GARY BRETON
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
PILE REFERENCE: 2709.1002-001
CURRENT PILING NUMBER: US/09/543,681A
CURRENT PILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 60/128,706
PRIOR PILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344
SEQ ID NO 6274
LENGTH: 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6274, Application US/09543681A Patent No. 6605709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                              556
                                                                                                                                                                                                                                      448
                                                                                                                                                                                                                                                                         158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138
                                                                                                                              277
                                                                                                                                                                   508
                                                                                                                                                                                                                                                                                                            388
                                                                                                                                                                                                                                                                                                                                               330 IEQQSLPI--NKKLADFHEQLKTHHEKKQHTLQLIREKVLPLDNQLGLLQQEISTNNQHK 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      185
                                                                                                                                                                                                                                                                                                                                                                                                                                                       270 QAGLNEAQQALIIAQPDIQRLEKNEPAEKIRPLYDEKNRRLTEQNYLATQLTSLKTEKQA 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            210 LKQQAQMMALLDATTRQELLTQQANIQAQVTRLQKEQQEYQVAKQWQEKALEIQQQQQSA 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125 CDLYFSRKPCSACLKMIVNAGVNRISYWPADPEISLLTEASSSEDAKLDAKAVERLKSNS 184
                                                                                                                                                                                                                                                                                                                                                                                                                    85 VKRTGLVVVKNMKIVGLHCSSEDLHA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \omega_{\omega}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 GLVVVKNMKIV-----GLHCSSE-----DLHAGQIALI---KHGSRLKN 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33;
                                                                                                                              KDLILLLATVASSVPNFKHFGFYRSNPEQINEIH-NQSLPQEIARHCMVQARLL 329
                                                                                                                                                                                                  TKTLPDANTDFYYECKQERIKEYEMLFLVSNEEMHKQILMTIGLENLCENPYFSNLRQNM 276
                                                                                                                                                                                                                                                                         ISLLTEASSSEDAKLDAKAVERLKSNSRA-HVCVLLQPLVCYMVQFVEETSYKCDFIQKI 216
                                                                                                                                                                                                                                                                                                          HKLEKI CABYLOHSOLAEKKLI TTOOQOVNOLNNOLTOHAYHAOLAENLPLWOHYFOOYNB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MKEAGOMQNLESARAGRSVSTQTGSMTGQIPRLSKVNL-FTLLSLWME------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PTVEKVTLVPKYFAELQWGEE 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RAHVCVLLQPLVCYMVQFVEE 205
                                                                                            QKIATLTQTIAENDLALK---
                                                                                                                                                                   DK--PD---EIKPRLQQINLQKNALAKIIN---LHTQ-LQRNGKE---QQHYQTTLSENQ 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ISSQYLANQKRETVEQEKVISLEKALQQATQTLATQQEQLNLQQQQLQSYQTQLDARQKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATIVRDKRIIAGGYNGSVSGGTHCIDEGCYVVDNHCVRTIHAEMNAILQCAKFGVPTEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 98.5; DB 2; Length 171; pred. No. 0.012; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 98.5; DB 2;
Pred. No. 0.33;
57; Mismatches 164;
                                                                                            ----EKAQHIKDINDNYLLIQKVAEYEQERARII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1244;
                                                                                                                                                                                                                                                                                                                                                                                                                      ---GQIALI-----KHG 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39;
                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                              447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17;
```

```
밁
                                                                                         8
                                                                                                                                   밁
                                                                                                                                                                 Ś
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Pseudomonas
US-09-252-991A-26732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
SEQ ID NO 26732
LENGTH: 547
                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILTMG DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                         215
                                                                                           133
                                                                                                                                   155
                                                                                                                                                                       98
                                                                                                                                                                                                         95 RTGDGRAAEARRSRLHPFRLGLPALPGPQRIPRGDRTPRPRAGQGMNAADPLYMARALEL 154
                                                                                                                                                                                                                                                   65 KHG----
                                                                                                                                                                                                                                                                                       49
                                                                                                                                                                                                                                                                                                                                                                48;
                                                                                                                                                                                                                                                                                                                           ហ
                                                                                                                                 ARQGLYSTHPNPRVGCVLVKDGQVVGEGWHVRAGEPHAEVHALRQAGENARGATAYVTLE 214
                                                                                                                                                                   ------KRTGLYVYKNMKIY--GLHCSSEDLHAGQIALIKHGSRLKNCDLYFSRK 132
                                                                                                                                                                                                                                                                                       GQAARRHAARPGEASGQRRAPGSGHRPHQAPV------ARHRRARDQVAGAG
                                                                                                                                                                                                                                                                                                                         GOMONLESARAGRSVSTOTGSMTGQIPRLSKVNLFTLLSLWMELFPAEAQRQKSQKNEEG
                                                         PCSHFGRTPPCADALVGAGVARVVAAMQDPNPEVAGRGLLRLMQAGIAVQSGVLEAEARE
                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                             -ACLKMIVNAGVNRISYWPADPE----
                                                                                                                                                                                                                                                                                                                                                              5.6%; Score 98; DB 2;
20.0%; Pred. No. 0.096;
ative 26; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          aeruginosa
2006, 19:17:49
                                                                                                                                                                                                                                                   -----PLGDNEERTRVSTDKRQV------
                                                                                                                                                                                                                                                                                                                                                                  6;
                                                                                               --ISLLTEASSSEDAKLDAKAVE 178
                                                                                                                                                                                                                                                                                                                                                                                                    Length 547;
                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                  ; 08
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                             274
                                                                                                                                                                                                                                                     85
                                                                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                              64
```

Search completed: September 16, Job time : 51 secs

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                        380.6
352.2
294
294
52.6
43.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                               nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             September 18, 2006, 01:17:09; Search time 337.697 Seconds (without alignments) 5634.983 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0
100.0
37.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-785-135-3
1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1403666 seqs, 935554401 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Issued Patents NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /EMC_Celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6A_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6B_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/H_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PE_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/RE_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/Backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atgaaagaagctgggcagat.....ctggtgagttacatagatcg 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
  BB
                    US-09-802-371-3

US-09-813-9902-4059

US-09-513-996-132

US-09-621-976-132

US-09-627-357-25

US-09-973-278-37

US-09-806-7088-22

US-08-232-463-14

US-07-593-657-14

US-07-593-657-14

US-07-593-657-16

US-08-942-016-103300

US-09-949-016-113300

US-09-949-016-11823

US-09-949-016-2860

US-08-346-849-1

US-08-3
  US-09-949-016-14602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2807332
                                                                                                                                                                                                                                                                                            Sequence 3, Appli
Sequence 1, Appli
Sequence 4059, App
Sequence 132, App
Sequence 37, Appl
Sequence 27, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 14, Appli
Sequence 6, Appli
Sequence 3, Appli
Sequence 3, Appli
                          Sequence
                                                                      Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
  Sequence
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
4259, Ap
1142, Ap
                                                                                                                                                                         29, Appl
2860, Ap
                                                                                                                                                                                                                                                14, Appl
6, Appli
3, Appli
40453, A
                                                                                                                                                                                                                           151823,
```

a	ი		ი	a	a	a		Ω	ი			ဂ		ი							ი	
45	44	4 3	42	41	40	39	38	37	36	ω S	34	33	32	31	3 Q	29	28	27	26	25	24	
37.8	37.8	38.2	38.4	38.4	38.4	38.4	38.4	38.6	38.6	38.6	38.6	38.6	38.8	39.2	39.8	39.8 "	40	40.2	40.2	40.2	40.4	
3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8			3.8	3.8	3.8		3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0	
50000	22118	54878	1664976	1664976	640681	601	555	636591	636591	194915	99304	601	264665	68490	601	601	1082144	30054	29960	832	317366	
ω	ω	ω	w	w	W	w	w	w	w	w	w	w	w	w	w	ω	4	w	ω	w	ω	
US-09-662-254B-26	US-09-815-981A-5	US-09-949-016-12255	US-09-692-570-1	US-08-916-421B-1	US-09-790-988-1	US-09-949-016-179878	US-09-248-796A-6899	US-09-949-016-13388	US-09-949-016-11808	US-09-949-016-15584	US-09-949-016-15440	US-09-949-016-56596	US-09-949-016-13747	US-09-949-016-15849	US-09-949-016-155756	US-09-949-016-22828	US-09-531-120-211	US-09-949-016-16100	US-09-949-016-11978	US-09-621-976-2813	US-09-949-016-16001	
Sequence 26, Appl	Sequence 5, Appli	Sequence 12255, A	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 179878,	Sequence 6899, Ap	Sequence 13388, A	Sequence 11808, A	Sequence 15584, A	Sequence 15440, A	Sequence 56596, A	Sequence 13747, A	Sequence 15849, A	Sequence 155756,	Sequence 22828, A	Sequence 211, App	Sequence 16100, A	Sequence 11978, A	Sequence 2813, Ap	Sequence 16001, A	

ALIGNMENTS

皮	ঠ	용	Ś	ğ	\$	B	Ş	뭥	δ	3 0	ı.Q	us-		 (2)	~· ~·		•		. . .			•	ດ :	 U (0	RESULT US-09-
										Matches		; ORGANISM: H US-09-802-371-3	TYPE:	SEQI	SOFTWARE:	PRIOR	PRIOR	CURRENT	TILE RE	TITLE	TITLE OF I	APPLICANT:	GENERAL INFORMATION:	Sequence 3	RESULT 1 US-09-802-
										- 0	Ma	9-802-371	TYPE: DI	NO DI	WAR	Ä		ENT	RE	E OF	E OF	įį	AL.	E E	102-
241	241	181	181	121	121	61	61	1	_	1017;	Ç	SM:	DNA	034			IIdd		PERE	F	A I	13	INFC	· w	371-
GAC	GA9	AT-	- A	g-	_0 _0	ACC	AC.	ATG	ATG	, tut		υ HOH	į	7	FastSEQ		CAT	FILING	REFERENCE: 358	INVENTION:	INVENTION	Mey	RMA	, Applic	ώ
8=	- 8	GAAG	GAAG	CI-	-8 -3	CAG:	-6 -6	AA A	- A	Cone		80				ATE	NOI		-	-	COL	Meyers,	TION	11ca 533	
GAC.	GAC CAC	AGQ	-#4 -#4 -#4 .	600	-0 -0 -0	(T)-	-G	AAG	AA A	ěrv		Homo sapiens			for:	20	MOM	DATE:	Z OO			Ra	::	tio	
AGGI		GAAA	- GA - SA	ICIG	-10	GCAG	GCAG	다. 다.	-00 -01 -01	Conservative		80				DATE: 2000-03-10	APPLICATION NUMBER: 60,	200	35800/213921 TON NUMBER: US/09/802.371	Molecule and	ENTION: 26934,	Rachel		Application US/09802371 723533	
AA-	- AA	ξ. Σ.	- 6 - 6	GA-	-8 -8	ČA:	= <u>Ş</u>	g-	- 6 - 6 - 6	9.5	100.0%;				Windows	3-1	60	2001-03-09	921	cul	, > 5	•		9/09	
3AG	JAGA	1003 1003	- G - G - G	GGAG		SACC	- GA	SATG	GATG	0,						0	188	3-09	18/0	e an	A No.	;		8023	
ACT.	-ACT	CC-	-00 -00 -00	G.	- Č	GG	- ig	Ž-	-Ö -ĕ	Mie	Score		•		Version		/188,294		9/8					71	
GI-		TAG	TAG	LITC		CAGA	- CA - CA - CA	ATC	Aic	isma							44	į	02.3	9 e 8	6723533el				
116		GAG	-@ -@	CAG	-8 -8	TAC	TAC	100 100 100	- i	Mismatches	7				4.0			į	71	Uses Thereof	3e1				
GG	_ - - -	TA	TATA	CAGA	- CA - GA	CAAG		AGAG	-GAG	98	2 0									reof	र्				
GACAAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAAACATGAAAATTGTTTGG	=63 =63	TGA-	-ig	AGC	-A -A -A	G-	-6 -6	CGC	- Ö - Ö	es 0;	DB 3										Cytidine				
Ä.	JAAA	GAG	- 6 - 6 - 6	CAG	=8 =8 =8	CI	_U	3AGG	3AGG																
Ş.	=\& =\&	AGQ:	- ଜୁନ	G-	_ନ -ନ	AAA A	- AA - AA	იე -	-60 -00	Indels	Length	•									Deaminase-Like				
TGA	TGA	CCA	- CC	AA	=\ <u>\</u>	STCA	E ST	3GC	-6 -6	18											inas			٠	
\$	- A - A - A	GAG	- G - G	AT:	- A	ACC:	_8 -8	G	- G	0;	1017;										e-L				
TGT		PATC	CATC	CICA	=8 =14	Lin		CAGT	CAGT		•										ike				
IGGI	GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGAAAAACATGAAAATTGTTGGT	AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT	AATGAAGAGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT	CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA	CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA	ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT	ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT	ATGAAAGAAGCTGGGCAGATGCAAAATCTGGAGAGCGCGAGGGCCGGGCGGTCAGTCA	ATGAAAGAAGCTGGGCAGATGCAAAATCTGGAGAGCGCGGAGGGCCGGGCGGTCAGTCA	Gaps															
300	300	240	240	180	180	120	[120	60	- 60																
9	3	3	0	3	0	9	0			0															

```
Sequence 1, Application US/09802371

Sequence 1, Application US/09802371

Patent No. 6723533

GENNERAL INFORMATION:

APPLICANT: Meyers, Rachel

APPLICANT: Rudolph-Owen, Laura

ITILE OF INVENTION: 26934, A No. 6723533el Cytidine Deaminase-Like

TITLE OF INVENTION: Molecule and Uses Thereof

FILE REFERENCE: 35800/213921

CURRENT APPLICATION NUMBER: US/09/802,371

CURRENT APPLICATION NUMBER: US/09/802,371

CURRENT FILING DATE: 2001-03-09

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 4

SOPTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 1585

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME VEV. COC
                                                                                                                                                                                                                                                                                                    RESULT 2
US-09-802-371-1
                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                            日
                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
NAME/KEY: CDS
LOCATION: (149)...(1165)
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                    CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                           AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTCTGGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGTCAAACAGTCGGGCCCATGTGTGTGTGTTACTTCAACCTTTGGTGTTATATAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTTGTATAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                           1017
                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                밁
                                                        Ś
                                                                                                           Ś
                                                                                                                                          밁
                                                                                                                                                               Ś
                                                                                                                                                                                             밁
                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                무
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (1)...(1585)
; OTHER INFORMATION: n = US-09-802-371-1
     S
                                                                                      밁
                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 1017; Conserv
                                 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     329
                                                           106
                                                                                      989
                                                                                                              841
                                                                                                                                          929
                                                                                                                                                                                              698
                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                  809
                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                      749
                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                           689
                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                629
                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                209
                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                         ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                CCGGATGCTAACACTGACTTTTATTATGAATGTAAACAAGAAGAATAAAAGAATATGAA
                                                                                                                                                                                                                                                                                                                  CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAAATTTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                          AAGTCAAACAGTCGGGCCCATGTGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG
                                               CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                      CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTTACCGT
                                                                                                                                          ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                  CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                           AAGTCAAACAGTCGGGCCCATGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                  CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAAGACAGGTAAAGAGAAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAAATCTCAGAAA
                                 AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTTGTTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,T,C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1017; DB 3;
Pred. No. 2.3e-268;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1585;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
           1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                              960
                                                                                                                   900
                                                                                                                                             988
                                                                                                                                                                       840
                                                                                                                                                                                                  928
                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                     898
                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                           808
                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                             748
                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                    889
                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

밁

1109

```
RESULT 4
US-09-621-976-132
                                                                                                                                       밁
                                                                                                                                                                    8
                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LOCATION: 121
; OTHER INFORMATION: Xaa=Gly or Ser
US-09-513-999C-4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-09-513-999C-4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
FILE REPERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4059, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature LOCATION: 458
OTHER INFORMATION: r=a FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: 98..460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 489
                                                                                                                                                                                                                                                                                                                                                                                                                      158
                                                                                                                                         398
                                                                                                                                                                                                                                                                                278
                                                                                                       361
                                                                                                                                                                         301
                                                                                                                                                                                                            338
                                                                                                                                                                                                                                                                                                                                                                                    121 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA 180
                                                                      457
                                                                                                                                                                                                                                            241 GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                   181 AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                              61 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              391;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTC-
                                                                                                                                                                CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA 360
                                                                                              AGGCTGAAAAACTGTGATCTTTATTTTTCCAGA 393
                                                                                                                                                                                                              GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                     CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                        ARGCTGAAAAACTGTGATCTTTATTTTTCCAGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09513999C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q

    Mismatches

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 380.6; DB 3
Pred. No. 2.9e-94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                         456
                                                                                                                                                                                                              397
                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                  337
                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                     277
                                                                                                                                                                                                                                                                                                                                                                                                                      217
                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
```

```
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human I:
FILE REFERENCE: GENSET.054PS.
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 132
LENGTH: 477
맑
                               Ś
                                                                     밁
                                                                                           . 2
                                                                                                                                          밁
                                                                                                                                                                         5
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 34.6%;
Best Local Similarity 99.2%;
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 132, Application US/09621976 Patent No. 6639063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Von Heijne matrix OTHER INFORMATION: score 6 OTHER INFORMATION: seq LFTLLSLWMELFP/AB NAME/KEY: misc_feature LOCATION: 394 COTHER INFORMATION: n=a, g, c or t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 124..477
NAME/KEY: sig_peptide
LOCATION: 124..273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                 301
                                                                      364
                                                                                                                                            304
                                                                                                                                                                                                                                                                                        184
 424
                                                                                                        241
                                                                                                                                                                               181
                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                             124 ATGAAAGAAGCTGGGCAGATGSAAAATCTGGAGAGCGCGAGGGCCGGCGGTCAGTCAGC
                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                       AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                    AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                     CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA 180
                                                                                                                                                                                                                                                                                        ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                            ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                     CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACAT 354
                                                                                                        GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                  CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                      GACAAAAGACAGGTAAAGAGAACTGGTCTTNTGGTGGTGAAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ی</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 352.2; DB 3
Pred. No. 1.7e-86;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
     477
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                          300
                                                                                                                                                                               240
                                                                                                                                            363
                                                                                                                                                                                                                  303
                                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                183
                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                          423
```

0

GENERAL INFORMATION:
APPLICANT: Pischer et al.
APPLICANT: Pischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/227,357
CURRENT FILING DATE: 1999-01-08
EARLIER APPLICATION NUMBER: PCT/US98/13684
EARLIER APPLICATION NUMBER: 60/051,926
EARLIER APPLICATION NUMBER: 60/051,926
EARLIER APPLICATION NUMBER: 00/051,926
EARLIER FILING DATE: 1997-07-08 RESULT 5 US-09-227-357-25 Sequence 25, Application US/09227357 Patent No. 6342581 APPLICATION NUMBER: 60/052,793

```
NUMBER OF SEQ ID NOS: 672
SOFTWARE: PATENTIN Ver. 2
SEQ ID NO 25
LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: SITE
LOCATION: (1248)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                         BR FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/052,803 FILING DATE: 1997-07-08
                                                                                                                                                                                                          APPLICATION NUMBER: 60/058,661
                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051,931 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/052,732
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION NUMBER: 60/051,920 ILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICATION NUMBER: 60/051,932
ILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: 60/051,919
ILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICATION NUMBER: 60/051,918
ILING DATB: 1997-07-08
                                                                                                                                                                                                                                                                                                                          PPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                 ON NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                         ON NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ON NUMBER: 60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N NUMBER: 60/055,947
                                                                                                                                                                                                                                                                                                                                                              NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/055,949
: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER: 60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-07-08
                                                                                                                                                                                                                                                                     1997-09-12
                                                                                                                                                                                                                                                                                                       1997-09-12
                                                                                                                                                                                                                                                                                                                                            1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                  1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                       1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-08-18
```

```
; NAME/KEY: SITE
-; LOCATION: (1551)
; OTHER INFORMATION:
US-09-227-357-25
                                     밁
                                                                                        밁
                                                                                                                                          밁
                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                    Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: SITE
NAME/KOY: (1396)
                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (1396)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (1393)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: (1389)
                                     1449
                                                                                                                                           1329
                                                                                                                                                                                              1269
                                                                                        1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                       472
                                                               652
                                                                                                                                                                     532
                                                                                                                                                                                                                                                                          412 ТТGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
GAATATGAAATGTTA 726
                                     TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTTACA
                                                                                                                                                          GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                           <u>ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG</u>
                                                                                                                                                                                                                     ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                  TTTTTAATGCATGGAAGAGCTGAACTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA 1268
                                                                                                                                           GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ħ
                                                                                                                                                                                                                                                                                                                  28.9%;
                                                                                                                                                                                                                                                                                                                                                                    equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                          equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                        a,t,g,
                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                  Score 294; DB 3;
Pred. No. 2.4e-70;
                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                          မ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   è
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ი
                                                                                                                                                                                                                                                                                                                              Length 1555;
                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                       Gaps
                                        1508
                                                                                                                                              1388
                                                                                                                                                                                               1328
                                                                                           1448
                                                                                                                   651
                                                                                                                                                                       591
                                                                                                                                                                                                                          531
                                                                                                                                                                                                                                                                              471
                                                                                                                                                                                                                                                                                                       0
```

RESULT 6
US-09-973-278-37
US-09-973-278-37
Sequence 37, Application US/09973278
Patent No. 6924354
GENERAL INFORMATION:
APPLICATI: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P2
CURRENT FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: 60/239,899
PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 1999-01-03
PRIOR FILING DATE: 1999-01-09
PRIOR PRIOR APPLICATION NUMBER: 60/27,357
PRIOR APPLICATION NUMBER: 60/27,357
PRIOR APPLICATION NUMBER: 60/051,926
PRIOR APPLICATION NUMBER: 60/051,926
PRIOR APPLICATION NUMBER: 60/051,926
PRIOR APPLICATION NUMBER: 60/051,925

```
NUMBER OF SEQ ID NOS: 94
SOFTWARE: PatentIn Ver.
SEQ ID NO 37
                                                                 LOCATION: (1248)...(1248)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (1389)...(1389)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
                                                                                                                                                                                               LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                FEATURE:
NAME/KEY: misc_feature
             NAME/KEY: misc_feature
.OCATION: (1391)..(1391)
THER INFORMATION: n equals a,t,g,
AME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/052,733 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-09
                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                  1997-09-12
)S: 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                               1997-09-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /052,732
                                                                         õ
                                                                                                                               or
c
```

```
Ś
                                                     밁
                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  딹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                        US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-806-708B-22/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: The University of British Columbia
TITLE OF INVENTION: Regulation of Embryonic Transcription in Plants
FILE REFERENCE: 4810-58741
                                                                                                                        Matches
                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                             SEQ ID NO 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22, Application US/09806708B Patent No. 6784342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 95.3
Matches 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/806,708B CURRENT FILING DATE: 2001-04-03
                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/147,133 PRIOR FILING DATE: 1999-08-04
                                                                                                                                                                                                        NAME/KEY: promoter
LOCATION: (1)..(1141)
OTHER INFORMATION: consensus sequence of A.t., L.a., and B.n. FAEl promoters
                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (1393)...(1393)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (1396)...(1396)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature LOCATION: (1551)..(1551)
                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1449
                                                   1051 ANWSCATKEMWWTMKWYATKYRTAWYAWMCAWRNNNMWCATNGYAKSCATNNAWMYATTR 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1209 TTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 472
148 CCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAAATGAAGAGGGAAAGCATGGACCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  412 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                     88
                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                               PatentIn
                                                                               GAATATGAAATGTTA 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAACATTGCCGGATGCTAACACTGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                               version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28.9%;
                                                                                                                     304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                     Score 52.6; DB 3;
Pred. No. 0.00028;
14; Mismatches 461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 294; DB 3;
Pred. No. 2.4e-70;
0; Mismatches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1555;
                                                                                                                                                      Length 1141;
                                                                                                                        Indels
                                                                                                                        ω
-:
                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1268
                       207
                                                                                        147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    531
                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
Ś
                                                                                                                                                                                                                                                                                            RESULT 8
US-08-232-463-14/c
                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                      Sequence 14, Application US/08232463 Patent No. 5670367
                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: CORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
                                                                                                                         NUMBER OF SEQUENCES: 5
COMPUTER READABLE FORM:
                 COUNTRY: USA
ZIP: 22313-03
                                                     STATE:
                                                                                        STREET:
                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             506 ATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   811 NNNNNNNTWCHYTTANABBCYRANNNNAAARMARTCNNYMHAAVTTTHTDWCYKTWMT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           871 NNNNARTYYWYHHAARRWMNAWWTRINNNNNNNNNNNNACRNTRIWWABWKHSWCNNNNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    451 MWMRRAWKMMNMAWCRRAYCCNNNNNRACVWHKHKMWRWTWKYMWKAACNNNNBKAMYMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            751 WYWDMMTTMBTTTTRNMTTSTNMTNNNNNNWWACTNNNNNNWWKAYYAHATNNWGCWWNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           991 WAAYAAAKWARWAGNNMRMYGAAAGNKWGCMAAMATMGBWWADTAGKMCNNNNNWTTDV
                                                                       Alexandria
                                                                                                                                                                                                                                                                                                                                                                      RNKYMVSWHYHAMRYBKWABAVGCNNNWKDRMAH 178
                                                                                                                                                                                                                                                                                                                                                                                                      ATTCACAATCAAAGTTTGCCACAGGAAATTGCAA 958
                                                                                                                                                                                                                                                                                                                                                                                                                                             KTVAWCNNRYYYDTAVWTBKRNYKYCYAYBWYYBMYMGKHHWBWWRRABHRSWNMWWVKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTGCCGAACTTTAAACACTTCGGATTTTACCG-TAGCAATCCAGAACAGATTAATGAA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NTHCTYGNNTWGSAYBMAAMSMWAAGASNBVTYNWCWRMTYMGKTMTNNNNNNKAWYYRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAGCAATCTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCA 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VAWMYSRDTINTDWMMWISDWBWHWYTVDYIMMRAWNNNNNNWRBCKTTSWMWWMDHM 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANATGCATAAGCAAATACTGATGACTATAGGTTTTGGAGAACCTGTGTGAAAATCCATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TRYYWWWKRWARBTTTVYDSMCNAKSMWRGNNWRAMKMWWAANNDAGAMDHWTYWMGNNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGTGACTTATTCAAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   YAHSYWYWSNNAMWYRRYSARNWSSMARWTTRNNWWMSGBVRMRWAGTMWWRHWNNNNTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MMTMRWTMKGDGMTVRKXVKWRDTTCTYVDVWADSWVWWYANWMRCRDVTYTRNNTYCKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCATACTGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGAAAAACCATGTTCTGCT--TGTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAA 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCGGGCAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAAACTGTGATCTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RRMAMKAKNINININAYWTACYNRAATINIKMATHWMKWTHGAHSKRRTRHHTRTCRRTKYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGT 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGAATGTAAACAAGAAAAGAATAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TDARRINNTTYMRRRWMINIKTRWYSTIRRHHYTGAINNNNNNNNNNNNNNNNNSCCTCIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTGTGGTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACAT
                                                     Ş
                                                                                      1800 Diagonal Road,
                                                                                                         Foley & Lardner
                                                                                                                                              52
                                                                                          Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872
                                                                                                                                                                                                                                                                                                                                                                                                                                               212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                685
```

```
RESULT 9
US-07-593-657-14/c
                                                      밁
                                                                                                             밁
                                                                                                                                     ş
                                                                                                                                                                     밁
                                                                                                                                                                                              S
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 300
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: line
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
COMPUTER: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                              1136
                                                                                                                                                                     1196
                                                                                                                                                                                                                            1256
                                                      1076 RRRRRRRRRRATCGCAAGCT
                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                     61 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                  AGGCTGAAAAACTGTGATCT 380
                                                                                                                                                                                                                            CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA 360
                                                                                                                                                                     GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT 300
                                                                                                                                                                                                                                                     AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                             CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             899149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pTZgpt-F1s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 43.2; DB 2; ilarity 1.6%; Pred. No. 0.22; Conservative 218; Mismatches 156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP 91 114 300.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30472/114 IMMU
                                                         1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2; Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                        1137
                                                                                                                                                                                                                                                           240
                                                                                                                   1077
                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

Sequence 14, Application US/07593657 Patent No. 5266317

GENERAL INFORMATION:
APPLICANT: Tomalski, Michael D.
APPLICANT: Miller, Lois K.
TITLE OF INVENTION: INSECT-SPEC
TITLE OF INVENTION: GENES FOR U

INSECT-SPECIFIC PARALYTIC NEUROTOXIN
GENES FOR USE IN BIOLOGICAL INSECT CONTROL: METHODS AND

CORRESPONDENCE ADDRESS
ADDRESSEE: Greenlee NUMBER OF SEQUENCES: TITLE OF INVENTION:

COMPOSITIONS

```
S
                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                              US-07-593-657-6/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-07-593-657-14
                                                                                                                                            GENERAL INFORMATION:
APPLICANT: TOMALSKI,
APPLICANT: Miller, L
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                          Sequence 6, Application US/07593657 Patent No. 5266317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 303/499-8080
TELEPAX: 303/499-8089
                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Ferber, Donna M.
REGISTRATION NUMBER: 33,0
REFERENCE/DOCKET NUMBER:
                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 319 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 51.0%;
             COUNTRY:
                                                                STREET:
                                                                                                                                TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/07/593,657
FILING DATE: 19901004
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 5370 P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                               DDRESSEE:
                                                                                                                                                                                                                                                                                                                                                           758 AAATACTGATGACT 771
                                                                                                                                                                                                                                                                                                                                                                                                                          698 AAGAAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAAATGAAGAAATGCATAAGC 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                          150 TTTAGTAAATTTAAAAAATTAAGTAAAATTATCGAAATTTTACTAATTTAAAAATTAAAA 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210 AATTATTTGTTTTAAAAAAATCAAATTTTTAGAAGTTACTTCTTAATAAAATTAGTCAA 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         578 AACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTA 637
                                                                                                                                                                                                                                                                                                                                                                                            90
                                                                                                                                                                                                                                                                                                                             30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99,
80303
     co
                                             Boulder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80303
                                                                                                                                                                                                                                                                                                                                                                                            S
                                                              E: Greenlee and Winner, P.C. 5370 Manhattan Circle, Suite 201
                                                                                                                                                                             Tomalski, Michael D. Miller, Lois K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B: Greenlee and Winner, P.C.
5370 Manhattan Circle, Suite 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
3: cDNA to mRNA
                                                                                                                             INSECT-SPECIFIC PARALYTIC NEUROTOXIN GENES FOR USE IN BIOLOGICAL INSECT COMPOSITIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33,878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 42; DB 2
Pred. No. 0.13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 319;
                                                                                                                                              INSECT CONTROL: METHODS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                      US-08-942-012B-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-07-593-657-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 97; Conserv
                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                               Sequence 3, Application US/08942012B Patent No. 6235278
                                      APPLICANT: Derks, Peter
APPLICANT: Black, Bruce
TITLE OF INVENTION: Biological Insect Control
TITLE OF INVENTION: Insect-Specific Toxin Gene
FILE REFERENCE: 28-96a
CURRENT APPLICATION NUMBER: US/08/942,012B
CURRENT FILING DATE: 1997-10-01
CURRENT FILING DATE: 08/729,606
                                                                                                                                                                                             APPLICANT:
                               PRIOR APPLICATION NUMBER: 08/
PRIOR FILING DATE: 2000-10-01
                    JUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1241 base pair
 OFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Ferber, Donna M.
REGISTRATION UNMER: 33,878
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOGTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: NUCLEIC ACID STRANDEDNESS: doub TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OCATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ECULE TYPE: cDNA to mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1166 TTTGTTTTAAAAAAAATCAAATTTTTTAGAAGTTACTTCTTAATAAAATTAGTCAATTTA 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                 1046 TTATATTATTAAATATAGATTTATATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1106 GTAAATTTAAAAAATTAAGTAAAATTATCGAAATTTTACTAATTTAAAAAATTÄÄÄAAGÄÄÄ 1047
                                                                                                                                                                                                                                                                                                                                                                                             762 ACTGATGACT 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      642 AAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATTATGAATGTAAACAAGA 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              582 TTTGGTGTGTTATATGGTGCAGTTTGTAGAGAGACCTCTTACAAATGTGACTTTATTCA 641
                                                                                                                                                                                                                                                                                                                                                            986 AACAACGICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  702 AAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAAT 761
PatentIn Ver. 2.0
                                                                                                                                                                                           Miller, Lois K.
Lu, Albert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1241 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303/499-8089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unsure
47..49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unsure
-103..-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SdD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119..985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303/499-8080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19901004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/07/593,657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              33,878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 41.2; DB Pred. No. 0.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                            Agents Expressing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                              Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

0

```
밓
                                                                           S
                                                                                                                                                      Ş
                                                                                                                   밁
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-09-949-016-40453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 95; Conserv
                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 601
TYPE: DNA
ORGANISM: Human
S-09-949-016-40453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 3
LENGTH: 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 40453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: VENTER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 40453, Ap
Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -08-942-012B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY: CDS
LOCATION: (119)..(985)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Pyemotes tritici
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1106 GTAAATTTAAAAAATTAAGTAAAATTATCGAAATTTTACTAATTTAAAAATTAAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1166 TTTGTTTTAAAAAAATCAAATTTTTTÄGÄAGTTÄCTTCTTAATAAATTAGTCAATTTÄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      582 TTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCA
769 ACTATA 774
                                      445
                                                                             709 AAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATG 768
                                                                                                                     385
                                                                                                                                                              589 TGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   762 ACTGATGACT 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 642 AAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATTATGAATGTAAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 4.1%; l Similarity 51.1%; 97; Conservative
                                      GAAAAAGAAGTCACATAATCTCTTATTAGAAATAATGAAAGTAAAATGAGAATTATAATA 504
                                                                                                                     AGAAAAAATTGAATTATTCAGGTAATATACAATATTAAGAATGTAGAATAGAACTAAAA
                                                                                                                                                                                                       TGTTCTACATATATGAGTAAACATGACACTTCTTTTAGTCAACTAATAGGAAATTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACAACGTCT 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAAT
                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09949016
                                                                                                                                                                                                                                                                                                       4.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 41.2; DB Pred. No. 0.38; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                         Score 40.4; DB Pred. No. 0.47;
                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 3;
                                                                                                                                                                                                                                                                                        91; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1241;
                                                                                                                                                                                                                                                                                                                             Length 601;
                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1107
                                                                                                                          444
                                                                                                                                                              708
                                                                                                                                                                                                       384
                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
; ORGANISM: Human US-09-949-016-151823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
US-09-949-016-151823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Human US-09-949-016-103300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/241,755
PRIOR PILING DATE: 2000-10-20
PRIOR PPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-09-949-016-103300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 103300
LENGTH: 601
TYPE: DNA
                                          SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 151823
LENGTH: 601
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 103300, App
Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 151823, A
Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                 APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,756
PRIOR FILING DATE: 2000-10-20
ERIOR FILING DATE: 2000-10-03
ERIOR FILING DATE: 2000-10-03
ERIOR FILING DATE: 2000-10-03
ERIOR FILING DATE: 2000-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/231,498 PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
                                                                                                                                    NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Y MATCH 4.0%;
Local Similarity 51.1%;
Les 95; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               505 TCAGTA 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589 TGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769 ACTAȚA 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TÇAGTA 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAAAGAAGTCACATAATCTCTTATTAGAAATAATGAAAGTAAAATGAGAATTATAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATG 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAAAAAATTGAATTATTCAGGTAATATACAATATTAAGAATGTAGAATAGAACTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTCTACATATATGAGTAAACATGACACTTCTTTTAGTCAACTAATAGGAAATTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 40.4; DB Pred. No. 0.47; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
FILE REFERENCE: DB-0014 US
CURRENT APPLICATION NUMBER: US/09/484,970B
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SOFTWARE: PERL PROGRAM
SEQ ID NO 29
LENGTH: 2737
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6426186 235636.1CB1
US-09-484-970B-29
Search completed: September 18, 2006, 02:47:41 Job time : 342.697 secs
                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                        á
                                                                                                                                                         밁
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
US-09-484-970B-29/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.0%;
Best Local Similarity 51.1%;
Matches 95; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 29, Application US/09484970B
Patent No. 6426186
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 4.0%; Score 40.4; DB 3; Length 601; Best Local Similarity 51.1%; Pred. No. 0.47; Matches 95; Conservative 0; Mismatches 91; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Walker, Michael G.
TILE OF INVENTION: BONE REMOILE PB-00"
RRENT ADDRESS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          325 TGTTCTACATATATGAGTAAACATGACACTTCTTTTAGTCAACTAATAGGAAATTCAATT 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        589 TGTTATATGGTGCAGTTTGTAGAGAGGACCTCTTACAAAATGTGACTTTATTCAAAAAATT
                                                                            405 TCAGTA 400
                                                                                                                769 AÇTATA 774
                                                                                                                                                         465 GAAAAAGAGTCACATAATCTCTTATTAGAAATAATGAAAGTAAAATGAGAATTATAATA
                                                                                                                                                                                               709 AAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATG 768
                                                                                                                                                                                                                                     525 AGAAAAAATTGAATTATTCAGGTAATATACAATATTAAGAATGTAGAATAGAACTAAAA
                                                                                                                                                                                                                                                           585 TGTTCTACATATATGAGTAAACATGACACTTCTTTTAGTCAACTAATAGGAAATTCAATT
                                                                                                                                                                                                                                                                                                                                                    589 TGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          505 TCAGTA 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 769 ACTATA 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445 GAAAAAGAAGTCACATAATCTCTTATTAGAAATAATGAAAGTAAAATGAGAATTATAATA 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           709 AAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATG 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    385 ÁGAAAÁAAÁTTGAATTATTCAGGTAATATACAATATTÁAGÁÁTGTÁGÁATAGAÁCTAAAÁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jones, Karen A. Volkmuth, Wayne
                                                                                                                                                                                                                                                                                                                                                                                        Score 40.4; DB 3; Length 2737; Pred. No. 0.88; 0; Mismatches 91; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                           406
                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                     466
                                                                                                                                                                                                                                                                                                                526
                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
```

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum
                                                                        . . . . . . . . . . . . . . . . . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                        Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               September 18, 2006, 01:17:09; Search time 526.303 Seconds (without alignments) 5634.983 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                            100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-785-135-1
1582.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1403666 seqs, 935554401 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /EMC_Celerra_SIDS3/ptodata/2/ina/1_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/5_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6A_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/6B_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/7_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/FCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/FCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/PCTUS_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/BC_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/BC_COMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ngcggtcaagcttgaggcgt.....atagcaagacctcgactcta 1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                        Length
             80
          US-09-802-371-1
US-09-802-371-3
US-09-802-371-3
US-09-802-371-3
US-09-621-976-132
US-09-949-016-42616
US-09-949-016-42616
US-09-949-016-42712
US-09-949-016-42712
US-09-949-016-93570
US-09-949-016-93666
US-09-949-016-93666
US-09-949-016-93666
US-09-949-016-93666
US-09-949-016-93698
US-09-949-016-93698
US-09-949-016-12970
US-09-949-016-12970
US-09-949-016-12977
US-09-949-016-12977
US-09-949-016-12977
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            model
                     Sequence 4059, App
Sequence 132, App
Sequence 25, Appl
Sequence 37, Appl
Sequence 42616, A
Sequence 42648, A
Sequence 42712, A
Sequence 42712, A
Sequence 42776, A
Sequence 93570, A
Sequence 93602, A
Sequence 93634, A
Sequence 93636, A
Sequence 93638, A
Sequence 93638, A
Sequence 93730, A
Sequence 12971, A
                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                           Sequence 1, Appli
Sequence 3, Appli
             б
                                             밁
                                                                       Ś
                                                                                                    밁
                                                                                                                             б
                                                                                                                                                              В
                                                                                                                                                                                        ঠ
```

იიი	0000	000	იი	
444	440		2 4 3 2 4	2022222
91.8 91.8 91.8	91.8	92.2 91.8 91.8	93.6 93.6 93.6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5.8 2923 5.8 2923 5.8 2923	5.8 2923 5.8 2923	5.8 18152 5.8 116652 5.8 2923 5.8 2923	6666	6.0 3206 6.0 3206 6.0 3206 6.0 3206
w.w.w	ωωω i			. பையையைய
US-09-067-447B-1 US-08-479-620-1 US-09-837-446-5	US-08-931-764-1 US-09-591-992-1	-09-949-016 -09-949-016 -08-480-449 -08-660-542	0000	US-09-949-016-12975 US-09-949-016-14436 US-09-949-016-14437 US-09-949-016-14438 US-09-949-016-14449 US-09-949-016-14440
Sequence 1, A Sequence 1, A Sequence 5, A	Sequence 1, A Sequence 1, A Sequence 1, A	بر مو سر مو د		Sequence 12975 Sequence 14436 Sequence 14437 Sequence 14439 Sequence 14439 Sequence 14440 Sequence 14440
Appli Appli Appli	Appli Appli Appli	b849, A 3413, A , Appli , Appli	2,1.	336 375 387 399 399 399 399 399 399 399 399 399 39

ALIGNMENTS

```
TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

NAME/KEY: misc feature

LOCATION: (1)...(1165)

OTHER INFORMATION: n = A,T,C or G

US-09-802-371-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. 6723533el Cytidine Dea
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASTSEQ for Windows Version 4.0
SEC ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-802-371-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09802371 Patent No. 6723533 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 1584; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                      182
                                                             122
                                                                                                122
                                                                                                                                       62
                                                                                                                                                                          62 AGAGGAGGTGAGAGGCGGGGGGCGTAGGGCCGAGATCATGTCTGACTGGGAGAGGGTTTCC
                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                       2 GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1585
AGCGCGAGGGCCGGGCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA
                                                                                                                                                                                                                   GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                    TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
                                                                                                                                         AGAGGAGGTGAGAGGGCGCGCGCGCCCGAGATCATGTCTGACTGGGAGAGGTTTCC
                                                             TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                               Score 1582.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                 G
                                                                                                                                                                                                                                                                                                                                        DB 3;
                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Deaminase-Like
                                                                                                                                                                                                                                                                                                                                      Length 1585;
                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                 181
                                                                                                    181
                                                                                                                                           121
                                                                                                                                                                                121
                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                            61
```

S

밁 S 문

S 밁

> 362 302 302 242 242

422

1561 1561 1501 1501 1441 1441 1381

362

1381

```
TTCATACAATATAGAGAAGTTAGTGAGACCCCTTGAGTAGACAACTCTTTCTCCCCAGCAGT
                                                                                          TGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTACTCATAGTTACTTAAGTTTTGCTG
                                                                                                                                                                   CAAAGTTTGCCACAGGAAATTGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATAT
                                                                                                                                                                                                                                                                                            AACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                                                                                                                                                                                                                                                                                                                                  AACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                                                                                                                                                                                                                                                                                                                                                                                      CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCAAATACTGATGACTATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCAAATACTGATGACTATAGGTTTTGGAGAACCTGTGTGAAAATCCCATACTTTTAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACAAGAAAGAATAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACAAGAAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTATTCAAAAATTTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCAACCTTTGGTGTGTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAACCATGTTCTGCTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAACCATGTTCTGCTTGTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAAGCATGGACCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCATACAATATAGAGAAGTTAGTGAGACCCTTGAGTAGACAACTCTTTCTCCCAGCAGT
                                                                         TGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTACTCATAGTTACTTAAGTTTTGCTG
                                                                                                                                                CAAAGTTTGCCACAGGAAATTGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATAT
                                                                                                                                                                                                                                                                                                                                                                       CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCGCGAGGGCCGGGCGGTCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA
                                    1321
                                                                          1261
                                                                                                             1261
                                                                                                                                                  1201
                                                                                                                                                                                    1201
                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. 6723533el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FRASESEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1017
TYPE: DNA
ORGANISM: Homo sapiens
US-09-802-371-3
ð
                                    밁
                                                                         Ş
                                                                                                             밁
                                                                                                                                          Ś
                                                                                                                                                                                    밁
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
US-09-802-371-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application Patent No. 6723533 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1017; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1322
   509
                                      301
                                                                            449
                                                                                                             241
                                                                                                                                                  389
                                                                                                                                                                                      181
                                                                                                                                                                                                                         329
                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                269
                                                                                                                                                                                                                                                                                                                                                                                                                                                149
                                                                                                                                                                                                                                                                                                                                                                         209
                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                  GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                       AATGAAGAGGGAAAGCATGGACCCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                  CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA 328
                                                                                                                                                                                                                                                                                                                                                      ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                               CAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                 GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGAAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                      CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                    ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                           CAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACTITAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGGCCCTTCTTCTGCTTCTTGCTTTATGATTTCACTGKTCCTTGAGCCCTCCACTA
   AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAAATG
                                        CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAGGCCCTTCTTTCTGCTTCTTGCTTTATGATTTCACTGKTCCTTGAGCCCTCCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64.3%; Score 1017; DB 3; Length 1017; ilarity 100.0%; Pred. No. 2.1e-271; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/09802371
```

0;

Gaps

0

180

120 268 60 208

388

895

360 508 300 448 240 Ś

542

542

662

602 602 밁 ঠ B 5 문

482 482 422

밁 Ś 밁 S 망

1262

5 밁 ঠ 문 ঠ 밁 8 밁 S В S 밁 S 밁 Ś 밁 8 밁 S 문

1082 1082 1022 1022

962

902 902 842

842 782 782 722 722 662

1142

```
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and
Patent No. 6783961
Patent No. 6783961
PATENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR PATENT DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOPTWARE: Patent.pm
SOPTWARE: Patent.pm
SOPTWARE: DAA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-513-999C-4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4059, Application US/09513999C
Patent No. 6783961
GENERAL INFORMATION:
                                                             FEATURE:
NAME/KEY: CDS
LOCATION: 98..460
LOCATION: 458 TOTHER INFORMATION: r=a
                  NAME/KEY: misc_feature
LOCATION: 458
                                                 EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATGGTG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG′808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGTCAAACAGTCGGGCCCATGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
õ
                                                                                                                                                                                                                                                                                                                                    and
                                                                                                                                                                                                                                                                                                                                    Encoded
                                                                                                                                                                                                                                                                                                                                    Human Proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
```

```
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Obbert, S.
APPLICANT: Giordano, J.Y.
ITILE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTMARE: Patent.pm
SEQ ID NO 132
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
US-09-621-976-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: UNSURE
; LOCATION: 121
; OTHER INFORMATION:
US-09-513-999C-4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
LENGTH: 477
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 124..477
NAME/KEY: sig_peptide
LOCATION: 124..273
OTHER INFORMATION: score 6
OTHER INFORMATION: score 6
OTHER INFORMATION: seq LFTLLSLMMELFP/AE
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                          Sequence 132, Application US/09621976 Patent No. 6639063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 30.0%;
Best Local Similarity 99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGTCTTGTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAAGCATGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANATCTGGAGAGCGCGAGGGCCGGCCGTCAGTCAGCACCCAGACTGGCAGCATGACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGGTTTCCTTGGCAGCAGGACGACGTTTTGGATGAAAGAAGCTGGGCAGATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGGTTTTCCTTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGTTGCTGAGAGGAGGTGAGAGGCGGGGGGGCGCTAGGGCCGAGATCATGTCTGACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTTCCAGA 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTA 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTCTTGTGGTGAAĀAACATGĀĀAATTGTTGGTCTCCACTGTTCTAGTGAAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAAGGGAAAGCATGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAATCTGGAGAGCGCGAGGCCGGTCAGTCAGCACCCAGACTGGCAGCATGACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xaa=Gly or Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 474.4; DB 3;
Pred. No. 2.4e-121;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ب
د.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
```

```
문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LOCATION: 394
; OTHER INFORMATION:
US-09-621-976-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
EARLIER I EARLIER I EARLIER I EARLIER I EARLIER EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 473;
                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/227,357
CURRENT FILING DATE: 1999-01-08
EARLIER APPLICATION NUMBER: PCT/US98/13684
EARLIER FILING DATE: 1998-07-07
EARLIER APPLICATION NUMBER: 60/051,926
EARLIER FILING DATE: 1997-07-08
EARLIER FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          equence 25, Application US/09227357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICANT: Fischer et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   386 ACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 GGGÁTGAAÁGÁAGCTGGGCAGATGSÁAÁATCTGGÁGAGCGCGÁGGGCCGGGCGGTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               146 GGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAGAGCGCGGAGGGCCGGGGGGGTCAGTC
                  APPLICATION NUMBER: 60/051,916 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,930
                                                                                                                                                                      APPLICATION NUMBER: 60/052,732
                                                                                                                                                                                                            FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,803
                                                                          APPLICATION NUMBER: 60/051,932 FILING DATE: 1997-07-08
                                                                                                                 APPLICATION NUMBER: 60/051,931 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/052,793 FILING DATE: 1997-07-08
                                                                                                                                                       FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/051,929
                                                                                                                                                                                                                                                                       FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86 TAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCCTTGGCAGCAGAGGACGCTAGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26 GGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTGAGAGGAGGTGAGAGGCGGGGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACAT 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAATGAAGAGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTOTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACCCAGACTGGCAGGATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTGAGAGGAGGCGAGAGGCGGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 473.6; DB Pred. No. 4e-121; 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

```
SEQ ID NO 25
LENGTH: 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NO
SOFTWARE: Patentin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER APPLICATION NUMBER: 60/058,660
EARLIER FILING DATE: 1997-09-12
EARLIER APPLICATION NUMBER: 60/058,661
EARLIER FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
LOCATION:
NAME/KEY:
                                                         NAME/KEY: SITE
LOCATION: (1396)
OTHER INFORMATION:
                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                  THER
                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: SITE
LOCATION: (1248)
OTHER INFORMATION:
                                                                                                                                                                                            AME/KEY:
                                                                                                                                                                                                                                                                          AME/KEY: SITE
                                                                                                                                                  THER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,953
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,950
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,947
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,964
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,964
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,684
ER APPLICATION NUMBER: 60/055,984
ER APPLICATION NUMBER: 60/055,984
ER APPLICATION NUMBER: 60/055,984
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,984
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/055,984
ER FILING DATE: 1997-08-18
ER APPLICATION NUMBER: 60/058,984
ER APPLICATION NUMBER: 60/058,684
ER FILING DATE: 1997-09-12
                                                                                                                                                                                                                             ION: (1391)
INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/055,948 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,722
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,723
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/052,795
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                          SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE: 1997-07-08
SITE
(1551)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                          (1389)
                                                              Ħ
                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                  Þ
                                                                                                                                                                                                                                  Þ
                                                                                                                                                                                                                                                                                                                    Ħ
                                                                                                                                                                                                                                                                                                                                                                                                        equals
                                                              equals
                                                                                                                                                                                                                                  equals
                                                                                                                                                                                                                                                                                                                    equals
                                                                                                                                                equals
                                                                                                                                                                                                                                  a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                        a,t,g,
                                                              a,t,g,
                                                                                                                                              a,t,g,
                                                                                                                                                                                                                                                                                                                    a,t,g,
                                                                                                                                                                                                                                  or
R
                                                              9
                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                      or
P
                                                                                                                                                                                                                                                                                                                                                                                                           얹
                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                           ი
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                CURRENT FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 2000-10-13
PRIOR PPLICATION NUMBER: 09/227,357
PRIOR PPLICATION NUMBER: 09/227,357
PRIOR PPLICATION NUMBER: 09/227,357
PRIOR PPLICATION NUMBER: 60/051,926
PRIOR APPLICATION NUMBER: 60/052,793
PRIOR PILING DATE: 1997-07-08
PRIOR PPLICATION NUMBER: 60/052,793
PRIOR PILING DATE: 1997-07-08
PRIOR PPLICATION NUMBER: 60/051,925
PRIOR APPLICATION NUMBER: 60/051,925
PRIOR APPLICATION NUMBER: 60/052,803
PRIOR PILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/052,803
PRIOR PILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/052,732
PRIOR PILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/051,931
PRIOR APPLICATION NUMBER: 60/051,931
PRIOR APPLICATION NUMBER: 60/051,931
PRIOR PILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/051,931
PRIOR APPLICATION NUMBER: 60/051,930
PRIOR PRIOR APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: n equals a,t,g, or US-09-227-357-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 37, Apparent No. 6924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 300; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P2
CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-10
APPLICATION NUMBER: 60/051,920 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,733
                                                                                         APPLICATION NUMBER: 60/051,930 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,918 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1209 TTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                860 GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620: ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 560 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    740 TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             680 GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09973278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 294; DB 3;
Pred. No. 3.6e-71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Length 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       799,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

8 밁

TITTTAATGCATGGAAGAGCTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA 1268 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA Query Match 18.6%; Best Local Similarity 95.2%; Matches 300; Conservative

0;

Score 294; DB 3; Pred. No. 3.6e-71; 0; Mismatches 15

Length 1555; Indels

0

Gaps

```
US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 37
LENGTH: 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/058,661 PRIOR FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 947
                   NAME/KEY: misc_feature
LOCATION: (1396)...(1396)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
LOCATION: (1551)...(1551)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                           LOCATION: (1389)..(1389)
OTHER INFORMATION: n equals a,t,g,
NAME/KBY: misc_feature
LOCATION: (1391)..(1391)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: (1248)..(1248)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (1389)..(1389)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/052,795
                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1393)..(1393)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/056,360 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,954 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,950
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,947
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/058,660 FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,949
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/055,723 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,928
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
                                                                                                                                                                   မ္
                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                             or
P
                                                                                                                                                                                                                                                                                                           ę
                                                                                               a
```

```
PRIOR PELLING DATE: 2000-10-20
PRIOR PELLING DATE: 2000-10-20
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-09-08
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-23
PRIOR PELLING DATE: 2000-10-3
PRIOR PELL
US-09-949-016-42648/c
Sequence 42648, Application US/09949016
Fatent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-949-016-42616/c

; Sequence 42616, Application US/09949016

; Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                  RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-949-016-42616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1495 ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1435 TCCACTAAAGGTAGGACAAGAAGAGAAAGGAGAGGCCCAGTGCAGTGGTTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540 TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         860 GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740 TATATGGTGCAGTTTGTAGAGGGAGACCTCTTACAAATGTGACTTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 94.8; DB 3; Length 601; Pred. No. 3.2e-16; 1; Mismatches 34; Indels
                                                       AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                       USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
```

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOPTWARR: FASESEQ for Windows Version 4.0
SEQ ID NO 42680
LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-99-08
NUMBER OF ESQ ID NOS: 207012
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 42648
                               Ş
                                                                                  뮍
                                                                                                                        Ś
                                                                                                                                                                     밁
                                                                                                                                                                                                           Ś
밁
                                                                                                                                                                                                                                                                                                                                             ); ORGANISM: Human
US-09-949-016-42680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-949-016-42680/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Human
US-09-949-016-42648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION: Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                   Matches 115; Conservative
                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 601
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                  1435 TCCACTAAAGGTAGGACAAGAAGAAGAAGGAGGCCCAGTGCAGTGGTTCATGCCTGTA 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1435 TCCACTAAAGGTAGGACAAGAAGAAAGGAGAGGCCCAGTGCAGTGGTTCATGCCTGTA 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42680,
                          GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                           ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
    GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                  ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA
                                                                                                                                                                          TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09949016
                                                                                                                                                                                                                                                                              6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.0%;
76.7%;
                                                                                                                                                                                                                                                        Score 94.8; DB 3;
Pred. No. 3.2e-16;
1; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 94.8; DB 3;
Pred. No. 3.2e-16;
1; Mismatches 34;
                                                                                                                                                                                                                                                                                                  Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 601;
                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>.</u>
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                         421
                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
Sequence 42712, Application US/09949016

Patent NO. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

ITITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION A FILE REFERENCE: CLOOL107

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-30

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

NUMBER OF COLORS COLO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                          ; ORGANISM: Human
US-09-949-016-42744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
US-09-949-016-42744/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-42712
                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-949-016-42712/c
                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 207012
SOPTWARE: FASTSEQ for Windows Version
SEQ ID NO 42744
LENGTH: 601
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
Query Match
Best Local Similarity 76.
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 42744, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 42712
LENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 6.0%;
Local Similarity 76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1435 TCCACTAAAGGTAGGACAAGAAGAAAAGGAGAGGCCCAGTGCAGTGCTTCATGCCTGTA 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                         6.0%;
76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
    Score 94.8; DB 3; Length 601; Pred. No. 3.2e-16; 1; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 94.8;
Pred. No. 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.2e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
    0
        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08

US-09-949-016-93570/c

Sequence 93570,

Application US/09949016

Patent No. 6812339
GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS

ASSOCIATED OF DETECTION AND USES THEREOF

FILE REFERENCE: CL001307

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR PILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
P
                                                                                                                                                                밁
                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                              밁
                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-42776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-949-016-42776/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 76.7 Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 42776,
Patent No. 6812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: CL001307
                                            1555 GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                     1495 ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                                                          1435 TCCACTAAAGGTAGGACAAGAAGAGAAAGGGAGAGGCCCAGTGCAGTGGTTCATGCCTGTA 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1435 TCCACTAAAGGTAGGACAAGAAGGAGAAAGGCCCCAGTGCAGTGCATGCCTGTA 1494
                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                              540 TTCTCCÁAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGTGGGCAACATAGCAAGACCTCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 94.8; DB 3;
Pred. No. 3.2e-16;
1; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-93570
                                                                                                             RESULT 15
US-09-949-016-93634/c
                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원. 문
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
US-09-949-016-93602/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-93602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
Sequence 93634, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 93602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 6.0%;
Best Local Similarity 76.7%;
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 93602, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 6.0
Best Local Similarity 76.7
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 93570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 601
                                                                                                                                                                                                                                                                                                                                                                                                              1435 TCCACTAAAGGTAGGACAAGAAGAAGGAGAGGCCCCAGTGCAGTGGTTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1495
                                                                                                                                                                                                                                               1555 GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1555 GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1435 TCCACTAAAGGTAGGACAAGAAGAGAAAGGAGAGGCCCAGTGCAGTGGTTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540 TTCTCCAAATGCTAGCTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                      GTCTGGGCAACATAGCAAGACCTCGTCTTT 391
                                                                                                                                                                                                                                                                                                                                      ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                                                                                                                  TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCCAGGTACAGTGGCTCATGCCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAAGGAGTTCAAGACCA 1554
                                                                                                                                                                                                                                                                                            ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 94.8; DB 3; Length 6
Pred. No. 3.2e-16;
1; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 94.8; DB 3; Length 6
Pred. No. 3.2e-16;
1; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 1494
                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
Ś
                                                                                  밁
                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                        ; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 93634
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-93634
밁
                                                                                                                                                                            밁
                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                 Matches 115;
                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-20
PRIOR PPLICATION NUMBER: 60/237,768
PRIOR PPLICATION NUMBER: 60/237,768
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
                                                                                                                          1495 ATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCCAGGAGTTCAAGACCA
                                                                                                                                                                                                          1435 TCCACTAAAGGTAGGACAAGAAGAAGAAAGGAGAGGCCCAGTGCAGTGCTTCATGCCTGTA
                         1555 GCGTGGGCAACATAGCAAGACCTCGACTCT 1584
                                                                                    480
                                                                                                                                                                            540 TTCTCCAAATGCTAGCTATGTTAAGAAATTTAAGGCCAGGTACAGTGGCTCATGCCTGTA
420 GTCTGGGCAACATAGCAAGACCTCGTCTTT
                                                                                    ATCCCGGCATTTTAGAAGGCTGAGGCAGGAGGATCACTTGAGCTCAGGAGTTTGAGACCA
                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                        6.0%;
                                                                                                                                                                                                                                                              Score 94.8; DB 3;
Pred. No. 3.2e-16;
1; Mismatches 34;
                                                                                                                                                                                                                                                                                                             Length 601;
                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                           1494
                                                                                         421
                                                                                                                                    1554
                                                                                                                                                                              481
                                                                                                                                                                                                                                                                     0
```

Search completed: September 18, 2006, 02:47:43 Job time : 528.303 secs

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -MODEL-frame+ D2n.model -DEV=xlh
-Qp/abse/ABSSWEB spool/US10785135/runat 15092006 155349 22641/app_query.fasta_1
-Qp/abse/ABSSWEB spool/US10785135/runat 15092006 155349 22641/app_query.fasta_1
-DB=Published_Applications_NA main -QFWT=fastap -SUFFIX=p2n.rnpbm
-NINWATCH:0.1 -LOOPEXT=0 -UNITS=bits -START=1 =RUN=-1
-MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -NORM=ext
-MATRIX=100 -THR_MIN=0 -ALIGN=15 -MODE-LOCAL -OUTFMT=pto -NORM=ext
-THR_MAX=100 -THR_MIN=0 -MAXLEN=2000000000 -HOST=abss04
-THRAFSIZE=500 -MINIEN=0 -MAXLEN=20000000000 -HOST=abss04
-USER=US10785135 @CGN 1 1675 @runat 15092006 155349 22641 -NCPU=6 -ICPU=3
-NORMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-NARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Command line parameters:
                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                           Score
1755 100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic search, using frame_plus_p2n model
                                                    Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published_Applications_NA_Main:*

1: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US07_PUBCOMB.seq:*

2: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US08_PUBCOMB.seq:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 10.0 , 1
Ygapop 10.0 , 1
Fgapop 6.0 , 1
Delop 6.0 , 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     September 20, 2006, 04:03:17; Search time 1427 Seconds (without alignments) 4378.600 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18892170 seqs, 6143817638 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-785-135-2
1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MKEAGQMQNLESARAGRSVS......RHCMVQARLLAYRTGELHRS 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                                                                     EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
EMC_Celerra_SIDS3/ptodata/2/pubpna/US10D_PUBCOMB.seq:*
EMC_Celerra_SIDS3/ptodata/2/pubpna/US10D_PUBCOMB.seq:*
EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US11A_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US11C_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/US11C_PUBCOMB.seq:*
                                                    Length DB
1017 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Celerra_SIDS3/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
_Celerra_SIDS3/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
_Celerra_SIDS3/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xgapext
Ygapext
Fgapext
Delext
US-09-802-371-3
                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.0
7.0
                                                       Description
Sequence 3, Appli
   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a a
```

		43	42		40																										14				10	9	œ	7	6	U	4.	u	2	
\mathbf{r}	12.	13.	17.	17.	J	17.	119.5	12	23.	123.5	23.	144	4	14	٠		8	0		0	309	0	0	0	0	0	0	30		7	37		654	-	767	ð	767	σ	030.	120	ū	7	υi	
6.4	6.4	ი	•	6.7	6.7	•	6.8	٠	٠	٠	٠	•	8.2	٠	8.7	8.7	16.2	17.1	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	20.0	21.4	21.4	24.7	•	40.8	43.7	43.7	43.7	43.7	58.7	ω	00.		100.0	
2	032	717	4271	968	1260	26	ū	1041	3	N	522	0	600	0	997	9	w	367		w	432	9	9	9	œ	8	œ	æ	φ	-	\vdash	9	N	8	55	55	55	55	84	2	1585	58	0	
10	10	10	ä	10	10	10	7	ω	10	10	10	10	10	10	12	12	9	ø	9	ø	ø	9	9	9	ø	9	9	9	σ	œ	œ	w	Ħ	16	10	W	ω	ω	10	ω	œ	w	œ	
US-10-793-626-	US-10-793-626-	US-10-467-657-562	US-10-915-740A-	US-10-915-74	501-282-5	US-10-501-282-597	-10-361-522-1	S-10-282-122A-353	US-10-501-282-665	-10-501-282-637	-10-501-282-637	-10-972-079-1023	972-079-1	-10-972-079-10228	0-301-480-1160	-10-301-480-54712	S-10-357-930-2599	-10-357-930-417	-10-357-930-4334	-10-357-930-418	-10-357-930-3294	-10-357-930-3448	10-357-930-133	-10-357-930-1176	0-357-930-28	-10-357-930-2750	-10-357-930-2270	10-357-930-21	-10-106-698-1661	S-10-085-783A-3	S-10-242-535A-3727	09-969-034-951	10-475-075-6	-11-021-492-51	US-10-472-533-8	-09-973-278-3	S-09-984-490-2	09-983-802-2	S-10-481-613-	-09-822-846-3	8-10-785-135-	-09-802-371-	US-10-785-135-3	
equence 1963,	quence 1625,	equence 5621,	ce 106	equence	quence 5973,	equence 5971,	quence 1, Ap	equence 35384,	e 6651	equence 6373,	equence 637	equence 10230	e 1	equence 10228	equence 1160	equence 547122	equence 2599, A	nce 4173,	equence 43346,	e 4186	e 32940,	e 34487,	nce 1334	equence 11	(D (A)	equence 27	e 2270	equence 21664,	equence 1661, A	e 37272	equence 3727	quence 951, A	e 60	equence 515,	equence 83, F	nce 37,	nce 25,	25,	Sequence 1	quence 332, App	equence 1, Appl	equence 1,	equence	

ALIGNMENTS

```
US-09-802-371-3
Sequence 3, Application US/09802371
Patent No. US20010036649A1
GENERAL INFORMATION:
APPLICANT: Nedolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. US20010036649A1el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
UNUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1017
TYPE: DNA
CORGANISM: Homo sapiens
US-09-802-371-3
Alignment Scores:
1.1e-212
Natches: 339
```

```
맑
                                                                                                               8
                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                             S
                                                                                                                                                                   S
                                                                                                                                                                                             밁
                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-785-135-2 (1-339) x US-09-802-371-3 (1-1017)
                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
               321
                                                                301
                                                                                          841
                                                                                                                   281
                                                                                                                                             781
                                                                                                                                                                       261
                                                                                                                                                                                                721
                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
                                                                                                                                                                                                               MetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThrIleGlyLeu
                                                                                                                                                                                                                                                                                                                                                          LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                                                                                                                                                                                                                            LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr
                                                                                                       LeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGlyPheTyrArg 300
                                                                                                                                                           GluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLysAspLeuIle
                                                                                                                                                                                                                                                                                                       CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                     GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysArgGlnValLysArgThrGlyLeuValValLysAsnMetLysIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCAGACTGGCAGGATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                    SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg
                                                                                                                                               GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                    ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTTGAAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                       AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0000
                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                         960
                                                                  320
                                                                                             900
                                                                                                                                               840
                                                                                                                                                                         280
                                                                                                                                                                                                 780
                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
```

```
Sequence 3, Application US/10785135

Sequence 3, Application US20040142375A1

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel

APPLICANT: Rudolph-Owen, Laura

ITILE OF INVENTION: 26934, A Novel Cytidine Deaminase-Like

ITILE OF INVENTION: Molecule and Uses Thereof

FILE REFERENCE: 35800/213921

CURRENT APPLICATION NUMBER: US/10/785,135

CURRENT FILING DATE: 2004-02-24

PRIOR APPLICATION NUMBER: US/99/802,371

PRIOR APPLICATION NUMBER: US/09/802,371

PRIOR APPLICATION NUMBER: 00/188,294

PRIOR APPLICATION NUMBER: 00/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENGTH: 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                         밁
                                                         á
                                                                                        밁
                                                                                                                á
                                                                                                                                                     밁
                                                                                                                                                                               Ş
                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA; ORGANISM: H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 2
US-10-785-135-3
Ś
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-785-135-2 (1-339) x US-10-785-135-3 (1-1017)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores: Pred. No.:
   181
                              481
                                                           161
                                                                                          421
                                                                                                                        141
                                                                                                                                                       361
                                                                                                                                                                                  121
                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ب
LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal 200
                                                                                                                                                     ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                               AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                        AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                     CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                     LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                            CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                              LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                           ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                           IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                               LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer 120
                                                                                                                                                                                                                                                                              GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGAAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                              AspLysArgGlnValLysArgThrGlyLeuValValValLysAsnMetLysIleValGly 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.1e-212
1755.00
100.0%
100.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1017
339
0
0
                                                                                                                                                                                                                      360
                                                              180
                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                               300
                                   540
                                                                                              480
                                                                                                                           160
                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
```

```
Sequence 1, Application US/09802371

Patent No. US20010036649A1

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
ITITE OF INVENTION: 26934, A No. US20010036649A1el Cyt
ITITE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921

CURRENT APPLICATION NUMBER: US/09/802,371

CURRENT FILING DATE: 2001-03-09

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 4

SOPTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 1585

TYPE: DNA
                                                                                                                                                                                      | PEATURE:
| NAME/KEY: CDS
| LOCATION: (149)...(1165)
| NAME/KEY: misc_feature
| LOCATION: (1)...(1585)
| OTHER INFORMATION: n = A,T,C or G
| US-09-802-371-1
                                                                                      Query
DB:
              뮍
                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음 성 음
                                                             US-10-785-135-2 (1-339)
                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                      Alignment Scores: Pred. No.: Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-802-371-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo
               149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
              MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGlyPheTyrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLysAspLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                            sapiens
                                                                                                  2.31e-212
1755.00
100.0%
100.0%
                                                             x US-09-802-371-1 (1-1585)
                                                                                                                                                                                                     Q
                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                     1585
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                              Cytidine
                                                                                                                                                                                                                                                                                                                                                                                                                              Deaminase-Like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320
                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
RESULT 4
US-10-785-135-1
(Sequence 1, Application US/10785135
; Publication No. US20040142375A1
; GENERAL INFORMATION:
   APPLICANT: Meyers, Rachel
; APPLICANT: Meyers, Rachel
; TITLE OF INVENTION: 26934, A Novel Cytidine Deaminase-Like
; TITLE OF INVENTION: Molecule and Uses Thereof
                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                             밁
                                                                                                                                                 Ś
                                                                                                                                                                          밁
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유양
                                                                                                                                                                           1049
                                                                                                                              1109
                                                                                                                                                    321
                                                                                                                                                                                                     301
                                                                                                                                                                                                                              989
                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                            929
                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                             698
                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                              608
                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                              749
                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                           HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
                                                                                                                                                                                                                                                                            LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                           SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg 320
                                                                                                                                                                                                                                            LeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGJyPheTyrArg 300
                                                                                                                                                                                                                                                                                                                                          MetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThrIleGlyLeu
                                                                                                                                                                                                                                                                                                                                                                              ProAspAlaAsnThrAspPheTyrTyrCluCysLysGlnGluArgIleLysGluTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLysArgGlnValLysArgThrGlyLeuValValValLysAsnMetLysIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGAAGAGGGAAAGCATGGACCCTTAGGAGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                                                                                                                                                                                                                              CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                                                             ATGITATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388
                                                                                                                                                                                                                                                                                                                                928
                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                868
                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
```

```
FILE REPERBNCE: 35800/213921
CURRENT APPLICATION NUMBER: US/10/785,135
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/802,371
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR PILING DATE: 2000-03-10
PRIOR PILING DATE: 2000-03-10
SEQ ID NO 1
SEG ID NO 1
SEG ID NO 1
                                                                                                                     8
                                                                                                                                                       밁
                                                                                                                                                                                     á
                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; NAME/KEY: misc_feature
; LOCATION: (1)...(1585)
; OTHER INFORMATION: n = A,T,C
US-10-785-135-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-785-135-2 (1-339) x US-10-785-135-1 (1-1585)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1585
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (149)...(1165)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                         569
                                                                                                                                                                                                                     509
                                                                                                                                                                                                                                                                                                                                              389
                                                                                                                                                                                                                                                                                                                                                                                                            329
201 GlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeu
                                                                                                           161 LeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaValGluArgLeu
                                                                                                                                                                                     141
                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                  449
                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   149
                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                                                                                                                                                                         IleValAsnAlaGlyValAsnArgIleSerTyrTrpProAlaAspProGluIleSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys
                             LysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetVal
                                                                                                                                                                                                                    AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                       ArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMet
                                                                                                                                                                                                                                                                                   CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                  LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer
                                                                                                                                                                                                                                                                                                                                                GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                AspLysArgGlnValLysArgThrGlyLeuValValValLysAsnMetLysIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                          AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                AsnGluGluGlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.31e-212
1755.00
100.0%
100.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1585
339
0
                               748
                                                              200
                                                                                             688
                                                                                                                            180
                                                                                                                                                                                        160
                                                                                                                                                                                                                       568
                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                   508
                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                               100
                                                                                                                                                                                                                                                                                                                                                                                                              388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   208
                                                                                                                                                           628
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                        Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                         US-09-822-846-332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-822-846-332
                                                                                                                                                            APPLICANT: Graham, James R.

APPLICANT: Graham, James R.

APPLICANT: Genetics Institute, Inc.
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING NOVEL SECRETED PROTEINS
FILE REFERENCE: GIN 6400
CURRENT APPLICATION NUMBER: US/09/822,846
CURRENT FILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: 60/195,605
PRIOR PRICING DATE: 2000-04-06
NUMBER: OF SEQ ID NOS: 629
SOPTWARE: PATENTIN Ver. 2.0
SEQ ID NO 332
LENGTH: 2029
TYPES- NAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 332, Application US/09822846
Publication No. US20030027139A1
GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
APPLICANT: McCoy, John M.
APPLICANT: LaVallie, Edward R.
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                      TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  749
                                                                                                                                                                                                                                                                                                                                                                                          Agostino, Michael J.
Steininger II, Robert J.
Bowman, Michael R.
Spaulding, Vikki
Wong, Gordon G.
Clark, Hilary
Fechtel, Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa J
Evans, Cheryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHisArgSer 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGluIleAlaArg 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGlyPheTyrArg 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLysAspLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThrIleGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                  Resnick, Richard J.
Gulukota, Kamalakar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Merberg, David
Treacy, Maurice
                                                                                                                                                                                                                                                                                                                                                                               Howes, Steven H
                                                                                                                                       sapiens
    3.69e-131
1120.50
98.2%
97.3%
63.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Þ
              Conservative: Mismatches: Indels:
 Gaps:
                                                           Length:
Matches:
    2029
216
2
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       808
```

```
5
            APPLICANT: Zhang, Youming
APPLICANT: Moffart, Miriam
APPLICANT: Moffart, Milliam
APPLICANT: Moffart, Milliam
APPLICANT: Tinsley, Jon
TITLE OF INVENTION: Atopy
FILE REFERENCE: 16721-003US1 / P32688WO/KVC
FILE REFERENCE: 2003-12-13
FRIOR APPLICATION NUMBER: GB 0115211.5
FRIOR APPLICATION NUMBER: GB 0115212.3
FRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                US-10-481-613-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-785-135-2 (1-339) x US-09-822-846-332 (1-2029)
                                                                                                                                                                                                                                                                                             Sequence 1, Application US/10481613
Publication No. US20050085627A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     118 HisGlySerArgLeuLysAsnCysAspLeuTyrPheSerArgLysProCysSerAlaCys
                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgSer 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleAlaArgHisCysMetValGlnAlaArgLeuLeuAlaTyrArgThrGlyGluLeuHis 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluTyrGluMetLeuPheLeuValSerAsnGluGluMetHisLysGlnIleLeuMetThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVal
                                                                                                                                                                                                                                                                                                                                                                                                  AAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheTyrArgSerAsnProGluGlnIleAsnGluIleHisAsnGlnSerLeuProGlnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspLeuIleLeuLeuLeuAlaThrValAlaSerSerValProAsnPheLysHisPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleGlyLeuGluAsnLeuCysGluAsnProTyrPheSerAsnLeuArgGlnAsnMetLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGT
                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       137
; Sequence 25, Application US/09983802

publication No. US2003022185A1

GENERAL INFORMATION:

APPLICANT: Fischer et al.

TITLE OF INVENTION: 123 Human Secreted Proteins

FILE REFERENCE: P20101

CURRENT APPLICATION NUMBER: US/09/983,802

CURRENT FILING DATE: 2001-10-25

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PC1

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PC1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                               RESULT 7
US-09-983-802-25
                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity: Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-481-613-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SEQ ID NO 1
; LENGTH: 410846
; TYPE: DNA 3
; ORGANISM: Homo 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85125
                                                                                                                                                                                                                                    85725
                                                                                                                                                                                                                                                                                                                                                                     85605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85365
                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135
                                                                                                                                                                                                                                  GCATATCGAACTGGTGAGTTACATAGATCG
                                                                                                                                                                                                                                                     AlaTyrArgThrGlyGluLeuHisArgSer
                                                                                                                                                               Application US/09983802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.29e-116
1030.50
96.2%
94.8%
58.7%
```

```
US-10-785-135-2 (1-339) x US-10-481-613-1 (1-410846)
                                                                                        HisasnGlnSerLeuProGlnGluIleAlaArgHisCysMetValGlnAlaArgLeuLeu
                                                                                                                                                                 ValProAsnPheLysHisPheGlyPheTyrArgSerAsnProGluGlnIleAsnGluIle
                                                                                                                                                                                                                                        SerAsnLeuArgGlnAsnMetLysAspLeuIleLeuLeuLeuAlaThrValAlaSerSer
                                                                                                                                                                                                                                                                                             ATGCATAAGCAAATACTGATGACTATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTT
                                                                                                                                                                                                                                                                                                                                                                      GAATGTAAACAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                       GluCysLysGlnGluArgIleLysGluTyrGluMetLeuPheLeuValSerAsnGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCTTACAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValLeuLeuGlnProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaLysLeuAspAlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerTyrTrpProAlaAspProGluIleSerLeuTeuThrGluAlaSerSerSerGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGCATGTATCTCATAATTACCTTTCGTATTTTGTATTTCAGCTGGAGTTAACCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCCGAACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATT
                                                                                                                                                                                                                    AGCAAT CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGT
                                                                                                                                                                                                                                                                                                                  MetHisLysGlnIleLeuMetThrIleGlyLeuGluAsnLeuCysGluAsnProTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATACTGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                  339
85754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 410846
199
                                                                                                           329
                                                                                                                                                                                                                                                                                                                                                                        85484
                                                                                                                                                                                                                                                                                                                                                                                                                                               85424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        169
                                                                                                                                                                                                                                                                                               85544
                                                                                                                                                                                                                                                                                                                                                                                                           249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85304
                                                                          8572
                                                                                                                                                 85664
                                                                                                                                                                                    309
                                                                                                                                                                                                                        85604
                                                                                                                                                                                                                                                           289
                                                                                                                                                                                                                                                                                                                                    269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               149
```

PCT/US98/13684 09/227,357

```
SOFTWARE: PatentIn
SEQ ID NO 25
LENGTH: 1555
                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
TYPE: DNA
ORGANISM: Homo sapiens:
FBATURE:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER
APPLICATION NUMBER: EARLIER
APPLICATION SARLIER FILING
FARLIER
FARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                      FILING DATE:
                                                                                                                                                     FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                           FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                        EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER
                                                                                                                                                                                                                                      EARLIER
                                                                                                                                                                                                                                                                        EARLIER FILING
                                                                                                                                                                                                                                                                                                          EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER FILING
                                                                                                                                                                                     R APPLICATION NUMBER: (
G DATE: 1997-09-12
R APPLICATION NUMBER: (
G DATE: 1997-09-12
R APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                      R APPLICATION NUMBER: (
G DATE: 1997-08-18
R APPLICATION NUMBER: (
G DATE: 1997-08-18
G DATE: 1997-08-18
G PAPPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R APPLICATION NUMBER: (
G DATE: 1997-08-18
R APPLICATION NUMBER: (
G DATE: 1997-08-18
                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE: 1998-07-07
APPLICATION NUMBER: 60/051,926
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                      APPLICATION NUMBER: DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1997-07-08
                                                                                                                                                                                                                                                                                          60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/051,929
                                                                                                                                                      60/058,661
                                                                                                                                                                                        60/058,660
                                                                                                                                                                                                                        60/058,664
                                                                                                                                                                                                                                                        60/058,785
                                                                                                                                                                                                                                                                                                                           60/055,984
                                                                                                                                                                                                                                                                                                                                                           60/055,684
                                                                                                                                                                                                                                                                                                                                                                                             60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                               60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/052,793
```

```
S
                                                                                          g
                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                            묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                 5
                                                                                                               5
                                                                                                                                         맑
                                                                                                                                                              Ş
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-785-135-2 (1-339) x US-09-983-802-25 (1-1555)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: US-09-983-802-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: NAME/KEY: SITE LOCATION: (1551)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (1389)
OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (1248)
OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: SITE
LOCATION: (1393)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COCATION: (1391)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
0
...
                      103
                                             548
                                                                                           488
                                                                                                                                         428
                                                                                                                                                                                       368
                                                                                                                                                                                                                                     308
                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                         84
                                                                     93
                                                                                                                 89
                                                                                                                                                                88
                                                                                                                                                                                                               85
                                                                                                                                                                                                                                                                                                                                                                                                    44
                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                   24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                 GlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAspLysArg
                                                                                           TTGAAGGGTAGAACACTCTGTGGGCTCTCTTTCTATTTCCTTCTGGGTACAATCACAAAA
                                                                                                                                                                                     GATATGAGGTTTGAGGCCTTCAAAATTGCTTTGCAGCATAAGCCACAGTGAGTCAGGAGT
                                                                                                                                                                                                                                     GAAATGGATTATGAGAACTCGAACAGAGGGAAGGTGAAATGCAACCGGAGGAAACACTCT
                                                                                                                                                                                                                                                                                                                                                                               CTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAAAATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                              LeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsnGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                              GGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACTCTGCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSerThrGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (1248)
                    lLysAsnMetLysIleValGlyLeuHis----
                                                                                                                                          ACCAGGGAGTGGATAGAATGTTTATTTGTTTAACTGAGACTTTTTAGTTCATCAATTATT
                                                                                                                                                                                                                                                                                   CAGGATTACTGGGAGCAGCTAAGATGCCTARATGAAAGGTTTACCATCACTGCTGGTTAG
                                                                                                                                                                                                                                                                                                            Gln-----
                                                                                                                                                                                                                                                                                                                                 GCAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGA
CTGTTCATTAATTGACGAACATTTGTGTACTTAACTATGTATAAGGCATCTCATCGTTCA
                                             <u>AAAAATCTCTCCTAGCTGAAATTACATGCAGTACTAGCAAAGGGTCTCTTTGTTATAAA</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1396)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.27e-86
767.00
41.1%
38.5%
43.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ٥
                                                                                                                    -GlγLeuValVal-Va
                                                                                                                                                                                                               ValLysArg
                                                                                                                                                                                          427
                                                607
                                                                                               547
   667
                                                                                                                                                                                                                                        367
                         118
                                                                       102
                                                                                                                    93
                                                                                                                                                                    88
                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                               84
                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                          83
                                                                                                                                                                                                                                                                                                                                                                                  187
                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                       43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23
```

SULT 8 -09-984-490-25 -colored to the colored to th
SGluTyrGluMetLeu 242 AGAATATGAAATGTTA 1523
rlysThrLeuProAspAlaAsmThrAspPheTyrTyrGluCysLysGlnGluArgIleLy
STYTMETVA1G1nPheVa1G1uG1uThrSerTyrLySCysAspPheI1eG1nLySI1eTh
IGIUATGLeULYSSerAsnSerArgAlaHisValCySValLeULeUGInProLeuValCy
ulleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVa
AlaGlyValAsnArgIleSerTyrTrpProAlaAspProGl
SABPLeutyrPheSerAtgLysPtoCysSerAlaCys
ACCATTCCCCTATTTTGGTCATTTAGGTTTTTGGGTTTTTGGTTTTGTTTTAACGT
aaattctttgtggacatatttgataactgttttattatgaggaggaccataattaat
AAAGITAATATIGCCCITCAGACACCATCCCCAACATCACATAAGAATTITTTCCATGITAT
CACTGATTGAAAAATGATCTATTTAGTTTGTTGTTTTGTCTTTAATTTTTGTAAGCTTTAA
GlySerArgLeuly8
acaaattgtctgttcgtatctttttgtctctctttaggccttattcttgtcaattcatat
atttcaaatacaaattaaaatattttttcacatttgttatcctgttatgttttctcttt

```
PRIOR APPLICATION NUMBER: EARLIER APPLICATION PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: EARLIER APPLICATION NUMBER: EARLIER APPLIC
NUMBER OF SEQ ID NO
SOFTWARE: Patentin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER FILING D
DR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER FILING D
DR APPLICATION NUMBER: EARLIER A
DR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER A
DR FILLING DATE: EARLIER A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DR APPLICATION NUMBER: EARLIER FOR FILING DATE: EARLIER FILING IN APPLICATION NUMBER: EARLIER FOR APPLICATION NUMBER: EARLIER FOR FILING DATE: EARLIER FOR FILING DATE: EARLIER FOR FILING DATE: EARLIER FOR FILING DATE: EARLIER FOR FILING IN NUMBER: EARLIER FOR FILING IN NUMBER: EARLIER FOR APPLICATION NUMBER: EARLIER 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR FILING DATE: EARLIER FILING D
R APPLICATION NUMBER: EARLIER A
DR FILING DATE: EARLIER FILING D
DR APPLICATION NUMBER: EARLIER A
DR FILING DATE: EARLIER FILING D
DR APPLICATION NUMBER: EARLIER A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,954
DATE: 1997-08-18
APPLICATION NUMBER: 60/058,785
DATE: 1997-09-12
APPLICATION NUMBER: 60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/056,360
DATE: 1997-08-18
APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/055,723
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/052,733
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-08-18
APPLICATION NUMBER: 60/055,947
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,928
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/052,803
DATE: 1997-07-08
                                                                                              DATE: 1997-09-12
APPLICATION NUMBER: 60/058,661
DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/052,732
DATE: 1997-07-08
APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,929
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1998-07-07
APPLICATION NUMBER: 60/051,926
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                  DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DATE: 1997-07-08
                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                  60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/052,793
```

SEQ ID NO 25
LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KSY: SITE

```
Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-785-135-2 (1-339) x US-09-984-490-25 (1-1555)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-984-490-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: INAME/KEY: SITE LOCATION: (1396)
OTHER INFORMATION: INAME/KEY: SITE LOCATION: (1551)
OTHER INFORMATION: INAME/KEY: SITE LOCATION: (1551)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (1248)
OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (1391)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION:
                                                                                                                      488
               809
                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                                                             128
                                         103
                                                                                                                                                                                                                             368
                                                                                           93
                                                                                                                                               89
                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                        85
                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 AlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSerThrGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACTCTGCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThrLeuLeuSer
                                                                                                                                                                                                                                                                                  GAAATGGATTATGAGAACTCGAACAGAGGGAAGGTGAAATGCAACCGGAGGAAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                        GlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAspLysArg
                                                                                                                      TTGAAGGGTAGAACACTCTGTGGGCTCTCTTTCTATTTCCTTCTGGGTACAATCACAAAA
                                                                                                                                                                                                                            GATATGAGGTTTGAGGCCTTCAAAATTGCTTTGCAGCATAAGCCACAGTGAGTCAGGAGT
                                                                                                                                                                                                                                                                                                                                    CAGGATTACTGGGAGCAGCTAAGATGCCTARATGAAAGGTTTACCATCACTGCTGGTTAG
                                                                                                                                                                                                                                                                                                                                                                G1n-----
                                                                                                                                                                                                                                                                                                                                                                                           GGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAAAATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsnGluGlu
             CTGTTCATTAATTGACGAACATTTGTGTACTTAACTATGTATAAGGCATCTCATCGTTCA
                                                                 AAAAATCTCTCCTAGCTGAAATTACATGCAGTACTAGCAAAGGGTCTCTTTGTTATAAA
                                                                                          lLysAsnMetLysIleValGlyLeuHis-----
                                                                                                                                                                          ACCAGGGAGTGGATAGAATGTTTATTTGTTTAACTGAGACTTTTTAGTTCATCAATTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1389)
                                       -CysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHis-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.27e-86
.767.00
41.1%
38.5%
43.7%
                                                                                                                                                                                                                                                     ------ValLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ā
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1555
195
13
31
267
                                                                                                                                                GlyLeuValVal-Va
                                                                                                                      . 547
                                                                                                                                                                                                                              427
                                                                                                                                                                                                                                                        87
               667
                                                                  607
                                                                                                                                                93
                                                                                                                                                                                                                                                                                 367
                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                         247
                                                                                                                                                                                                                                                                                                                                                                                                                  83
                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                         118
                                                                                             102
                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67
                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                       밁
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                               US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                     Sequence 37, Application US/09973278 Publication No. US20040044191A1 GENERAL INFORMATION:
APPLICANT: Fischer et al.

TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P2
CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 2000-10-13
PRIOR APPLICATION NUMBER: 09/227,357
                                                                                                                                                                                                                                            1448
                                                                                                                                                                                                                                                                                                                                                                                                        1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1088
                                                                                                                                                                                                                                                                                                1388
                                                                                                                                                                                       1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1208
                                                                                                                                                                                                                                                                                                                         197
                                                                                                                                                                                                                                                                                                                                                                               177
                                                                                                                                                                                                                 237
                                                                                                                                                                                                                                                                                                                                                                                                                                  157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        728
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGA
                                                                                                                                                                                       AGAATATGAAATGTTA
                                                                                                                                                                                                        sGluTyrGluMetLeu
                                                                                                                                                                                                                                                          rLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLy 237
                                                                                                                                                                                                                                                                                               TNANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTAC
                                                                                                                                                                                                                                                                                                              GGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                        AATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                        uIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTTAGAATATTTTCCTAGAATGGATTCTCAGAAGAATTCTCAGTCTGTGGAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | IGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTGCTTGCTATTTTAAAGAATGCTGCACTAAATGTGAATGCTTGAGATTTCTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sAspLeuTyrPheSerArgLysProCysSerAlaCys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCATTCCCCTATTTTGGTCATTTAGGTTTTTGGGTTTTGGGTTTTTTTGTTTTÄÄCGT 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGTTAATATTGCCCTTCAGACACCATCCCAACATCACATAAGAATTTTTTCATGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTGATTGAAAAATGATCTATTTAGTTTGTTGTTTTGTCTTTAATTTTGTAAGCTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCTCTAATGAATTGAAATATTTTCTGTATATTAAACATTACTAACCTTTCCTCTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAAATTGTCTGTTCGTATCTTTTTGTCTCTCTTTAGGCCTTATTCTTGTCAATTCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTCAAATACAAATTAAAATATTTTTTCACATTTGTTATCCTGTTATGTTTTCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----GlySerArgLeuLys-----
                                                                                                                                                                                                                  242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaGlyValAsnArgIleSerTyrTrpProAlaAspProGl 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----LeuLysMetIleValAsn-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----- AsnCy 125
                                                                                                                                                                                                                                               1507
                                                                                                                                                                                                                                                                                                 1447
                                                                                                                                                                                                                                                                                                                          217
                                                                                                                                                                                                                                                                                                                                                                              197
                                                                                                                                                                                                                                                                                                                                                                                                          1327
                                                                                                                                                                                                                                                                                                                                                                                                                                   177
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               967
                                                                                                                                                                                                                                                                                                                                                     1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118
```

Ś 밁 S 밁 Ś В S S В δ 밁 Ś 뮍 5 8 S Ś

밁 5 밁

APPLICATION NUMBER: PCT/US98/13684

FILING DATE: 1998-07-07 APPLICATION NUMBER: 60/051,926

OR FILING DATE: 1997-07-08
OR APPLICATION NUMBER: 60/052,793
OR APPLICATION NUMBER: 60/051,925
OR APPLICATION NUMBER: 60/051,925
OR FILING DATE: 1997-07-08
OR APPLICATION NUMBER: 60/051,929
OR APPLICATION NUMBER: 60/052,803

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity: Query Match:
DB:
                                                                      S
                                                                                                      멍
                                                                                                                              S
                                                                                                                                                             밁
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-785-135-2 (1-339) x US-09-973-278-37 (1-1555)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PEATURE:

NAME/KEY: misc feature

LOCATION: (1248)...(1248)

OTHER INPORYATION: n equals a

NAME/KEY: misc feature

LOCATION: (1389)...(1389)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: n equals NAME/KEY: misc feature LOCATION: (1551). (1551)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (1551)..(1551)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (1393)...(1393)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: (1391)...(1391)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1396)..(139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (1389) .. (1389)
OTHER INFORMATION: n equals
                103
                                                                                                      488
                                                                                                                                                              428
                                                                                                                                                                                                                     368 GATATGAGGTTTGAGGCCTTCAAAATTGCTTTGCAGCATAAGCCACAGTGAGTCAGGAGT
                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                                         248 CAGGATTACTGGGAGCAGCTAAGATGCCTARATGAAAGGTTTACCATCACTGCTGGTTAG 307
                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                            128
                                                                       93
                                                                                                                                 68
                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24 GlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThrLeuLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 AlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSerThrGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsnGluGlu
                                                                                                                                                                                                                                                                               GAAATGGATTATGAGAACTCGAACAGAGGGAAGGTGAAATGCAACCGGAGGAAACACTCT
                                                                                                    TTGAAGGGTAGAACACTCTGTGGGCTCTCTTTCTATTTCCTTCTGGGTACAATCACAAAA 547
                                                                                                                                                                                                                                                                                                                                                                                                                       GlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAspLysArg
                                             ||||||:::
AAAAATCTCTCCTAGCTGAAATTACATGCAGTACTAGCAAAGGGTCTCTTTGTTATAAA 607
-CysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHis-----
                                                                      llysAsnMetLysIleValGlyLeuHis----
                                                                                                                                                             ACCAGGGAGTGGATAGAATGTTTATTTGTTTAACTGAGACTTTTTAGTTCATCAATTATT
                                                                                                                                                                                                                                                                                                                                                                        Gln-----
                                                                                                                                                                                                                                                                                                                                                                                                    GGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAAAATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACTCTGCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.27e-86
767.00
41.1%
38.5%
43.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a, t, g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                    GlyLeuValVal-Va
                                                                                                                                                                                                                                                  ----ValLysArg
                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                  367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43
                                                                                                                                    93
                                                                                                                                                                 487
                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127
                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                     247
                                                                                                                                                                                                                                                                                                                                                                                                                                  83
                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67
                                                                                                                                                                                                                                                                                                                                                                        84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23
```

DR FILING DATE: 1997-07-08

RR APPLICATION NUMBER: 60/051,919

RR FILING DATE: 1997-07-08

RR APPLICATION NUMBER: 60/051,928

RR FILING DATE: 1997-07-08

RR APPLICATION NUMBER: 60/055,722

APPLICATION NUMBER: 60/052,795

FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,949
FILING DATE: 1997-08-18

APPLICATION NUMBER: 60/055,948 APPLICATION NUMBER: 60/055,723 FILING DATE: 1997-08-18

FILING DATE:

1997-08-18

APPLICATION NUMBER: 60/055,953

1997-08-18

DR FILING DATE: 1997-07-08
R APPLICATION NUMBER: 60/051,918
DR FILING DATE: 1997-07-08
DR PILING DATE: 1997-07-08
R FILING DATE: 1997-07-08
DR PILING DATE: 1997-07-08
R FILING DATE: 1997-07-08

FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,932
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
FILING DATE: 1997-07-08

APPLICATION NUMBER: 60/051,930

FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,732 FILING DATE: 1997-07-08

APPLICATION NUMBER: 60/051,931

SOPTWARE: Pace... SOPTWARE: Pace... SEQ ID NO 37 SEQ ID NO 37

TYPE: DNA ORGANISM: Homo sapiens

PRIOR APPLICATION NUMBER: 60/058,661 PRIOR FILING DATE: 1997-09-12

FILING DATE: 1997-09-

APPLICATION NUMBER: 60/058,660 APPLICATION NUMBER: 60/058,664

APPLICATION NUMBER: 60/058,785 FILING DATE: 1997-09-12

FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,954

FILING DATE:

FILING DA

APPLICATION NUMBER: 60/056,360

1997-08-18

LING DATE:

ON NUMBER: 60/055,964

1997-08-18 1997-08-18

FILING DATE:

APPLICATION NUMBER: 60/055,947 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,950

FILING DATE:

APPLICATION NUMBER: 60/055,984 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,684

1997-08-18

NUMBER OF SEQ ID NOS: 947

PatentIn Ver.

S 밁 5

Ş 밁

```
US-10-472-533-83
                                                                                          Sequence 83, Application US/10472533 Publication No. US20050197285A1 GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS906PCT
CURRENT APPLICATION NUMBER: US/10/472,533
CURRENT FILING DATE: 2003-09-20
PRIOR APPLICATION NUMBER: US 60/331,287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1208
                                                                                                                                                                                                                                                          1448
                                                                                                                                                                                                                                                                                                                        1388
                                                                                                                                                                                                                                                                                                                                                                                     1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1088
                                                                                                                                                                                             1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 157
                                                                                                                                                                                                                         237
                                                                                                                                                                                                                                                                                        217
                                                                                                                                                                                                                                                                                                                                                     197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                                                                                             AGAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                       1GluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ulleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTTAGAATATTTTCCTAGAATGGATTCTCAGAAGAATTCTCAGTCTGTGGAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTCAAATACAAATTAAAATATTTTTTCACATTTGTTATCCTGTTATGTTTTCTCTTTT
                                                                                                                                                                                                              sGluTyrGluMetLeu 242
                                                                                                                                                                                                                                                          rLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLy
                                                                                                                                                                                                                                                                                                                        TNANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTGCTTGCTATTTTAAAGAATGCTGCACTAAATGTGAAATGCTTGAGATTTCTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sAspLeuTyrPheSerArgLysProCysSerAlaCys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGTTAATATTGCCCTTCAGACACCATCCCAACATCACATAAGAATTTTTTCATGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGCTCTAATGAATTGAAATATTTTCTGTATATTAAACATTACTAACCTTTCCTCTGTCA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----GlySerArgLeuLys------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAATTGTCTGTTCGTATCTTTTTGTCTCTCTTTTAGGCCTTATTCTTGTCAATTCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTCATTAATTGACGAACATTTGTGTACTTAACTATGTATAAGGCATCTCATCGTTCA 667
                                                                                                                                                                                                                                                                                                                                                     sTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleTh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -AlaGlyValAsnArgIleSerTyrTrpProAlaAspProGl
||||||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----LeuLysMetIleValAsn------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnCy 125
                                                                                                                                                                                                                                                          1507
                                                                                                                                                                                                                                                                                          237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177
                                                                                                                                                                                                                                                                                                                        1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1147
                                                                                                                                                                                                                                                                                                                                                     217
                                                                                                                                                                                                                                                                                                                                                                                                                    197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1207
                                                                                                                                                                                                                                                                                                                                                                                   1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60
PRIOR APPLICATION NUMBER: US 60
PRIOR APPLICATION NUMBER: US 60
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 650
SED ID NO 83
SEQ ID NO 83
                                                   밁
                                                                                                                                         S
                                                                                                                                                                             밁
                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (1551)..(1551); OTHER INFORMATION: n equ
US-10-472-533-83
                                                                             S
                                                                                                                 밁
                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-785-135-2 (1-339) x US-10-472-533-83 (1-1555)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:

FEATURE:

NAME/KEY: misc_feature

COATION: (1551)...(155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
LOCATION: (1396)..(1396)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (1248)..(1248)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (1393)..(1393)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
LOCATION: (1391)..(1391)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: (1389)..(1389)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: (1393)..(139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                    308
                                                                                                                 248
                                                                                                                                                                                188
                                                                                                                                                                                                                                            128
                                                                                                                                                 . 84
                       85
                                                                                  84
                                                                                                                                                                                                            64
                                                                                                                                                                                                                                                              44 LeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLysAsnGluGlu 63
                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                        24
                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                           GlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThrLeuLeuSer
                                                   GAAATGGATTATGAGAACTCGAACAGAGGGAAGGTGAAATGCAACCGGAGGAAACACTCT
                                                                                                                                                 Gln-----
                                                                                                                                                                                GGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACTGACAAAAGA
                                                                                                                                                                                                       GlyLysHisGlyProLeuGlyAspAsnGluGluArgThrArgValSerThrAspLysArg
                                                                                                                                                                                                                                                                                                                                                                      AlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSerThrGlnThr
                                                                                                                 CAGGATTACTGGGAGCAGCTAAGATGCCTARATGAAAGGTTTACCATCACTGCTGGTTAG
                                                                                                                                                                                                                                             CTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAAAATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.27e-86
767.00
41.1%
38.5%
43.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/277,340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/306,171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ù
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         မ္မ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                       ValLysArg
                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                           43
                                                                                                                                                                                                                83
                                                                                                                                                                                                                                                 187
                        87
                                                                                                                     307
                                                                                                                                                                                                                                                                                                              127
                                                                                     84
                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                           67
                                                                                                                                                                                                                                                                                                                                                                                                       23
```

밁 ঠ В र् 밁 δ 밁 5 밁 δ 밁 Ś 밁 S 밁 ঠ 밁 S 밁 S В S 밁

```
L028 ACCATTCCCCTATTTTGGTCATTTAGGTTTTTGGGTTTTGGGTTTTTTGTTTTÄACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           368 GATATGAGGTTTGAGGCCTTCAAAATTGCTTTGCAGCATAAGCCACAGTGAGTCAGGAGT
                                                                                                                                                                                                                         uIleSerLeuLeuThrGluAlaSerSerSerGluAspAlaLysLeuAspAlaLysAlaVa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGTTAATATTGCCCTTCAGACACCATCCCAACATCACATAAGAATTTTTTCATGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        llysAsnMetLysIleValGlyLeuHis-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAAGGGTAGAACACTCTGTGGGCTCTCTTTCTATTTCCTTCTGGGTACAATCACAAAA 547
lGluArgLeuLysSerAsnSerArgAlaHisValCysValLeuLeuGlnProLeuValCy
                                                                                                                                                                                                    AATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGT
                                                                                                                                                                                                                                                                       ATTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                        saspieuTyrPheSerargLysProCysSeralaCys--------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTGATTGAAAAATGATCTATTTAGTTTTGTTTTTGTCTTTAATTTTTGTAAGCTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCTCTAATGAATTGAAATATTTTCTGTATATTAAACATTACTAACCTTTCCTCTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAAATTGTCTGTTCGTATCTTTTTGTCTCTCTTTAGGCCTTATTCTTGTCAATTCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAATCTCTCCTAGCTGAAATTACATGCAGTACTAGCAAAGGGTCTCTTTGTTATAAA
                 rLysThrLeuProAspAlaAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLy
                                                                  TNANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTAC 1447
                                                                                    sTyrMetValGlnPheValGluGluThrSerTyrLysCysAspPheIleGlnLysIleTh
                                                                                                                                   GGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                        TATTTAGAATATTTTCCTAGAATGGATTĆTĆAGAAGAATTCTCAGTCTGTGGAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                           CTTTGCTTGCTATTTTAAAGAATGCTGCACTAAATGTGAATGCTTGAGATTTCTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTTCAAATACAAATTAAAATATTTTTTCACATTTGTTATCCTGTTATGTTTTCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTCATTAATTGACGAACATTTGTGTACTTAACTATGTATAAGGCATCTCATCGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -CysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHis-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCAGGGAGTGGATAGAATGTTTATTTGTTTAACTGAGACTTTTTAGTTCATCAATTATT
                                                                                                                                                                                                                                                                                              -AlaGlyValAsnArgIleSerTyrTrpProAlaAspProGl
||||||||||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                    ---LeuLysMetIleValAsn--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyLeuValVal-Va
                                                                                                                                                                                                                                                                                                                                                                      AsnCy 125
                                                                                                                                                                                                                                                                       1267
                                 237
                                                                                                    217
                                                                                                                                 1387
                                                                                                                                                                     197
                                                                                                                                                                                                      1327
                                                                                                                                                                                                                                     177
                                                                                                                                                                                                                                                                                                        157
                                                                                                                                                                                                                                                                                                                                          1207
                                                                                                                                                                                                                                                                                                                                                                                                           1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    118
                                                                                                                                                                                                                                                                                                                                                                         143
                                                                                                                                                                                                                                                                                                                                                                                                                                            137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Abuin, Alejandro
APPLICANT: Zambrowicz, Brian
APPLICANT: Sands, Arthur T.
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: Novel Mutated Mammalian
TITLE OF INVENTION: Animals
FILE REFERENCE: LEX-0368-USA
CURRENT APPLICATION NUMBER: US/11/021,492
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: US 60/307,670
PRIOR FILING DATE: 2001-07-2
NUMBER OF SEQ ID NOS: 698
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 515
LENGTH: 489
TYPE: DNA
ORGANITAM: MNs. muscullus
 뭉
                        8
                                                                  닭
                                                                                                                                 밁
                                                                                                                                                                 S
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                             δ
                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-785-135-2 (1-339) x US-11-021-492-515 (1-489)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
US-11-021-492-515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ୍ୟ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-11-021-492-515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 515, Appli
Publication No. US2
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Mus musculus FEATURE: NAME/KEY: misc_feature LOCATION: 183, 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: n =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1508
 421
                                 223
                                                                  361
                                                                                                    203
                                                                                                                                     301
                                                                                                                                                                      183
                                                                                                                                                                                                        241
                                                                                                                                                                                                                                       163
                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                         124
                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           237
                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alGluGluThrSerTyrLysCysAspPheIleGlnLysIleThrLysThrLeuProAspA
                                                                                                                                                                                                                                                                                                                                                               AsnCysAspLeuTyrPheSerArgLysProCysSerAlaCysLeuLysMetIleValAsn
                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGTGAAGACTTACATACTGGGCAAATTGCTCTCATTAAGCATGGGTCCAGGCTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                SerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySerArgLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAATATGAAATGTTA 1523
 laAsnThrAspPheTyrTyrGluCysLysGlnGluArgIleLysGluTyrGluMetLeu
                                                                                                                                     ACAGCCGGGCCCATGTGTGTGTTACTCCAGCCGTTGGTGTGTTACATGGTGCAGTTTG
                                                                                                                                                      snSerArgAlaHisValCysValLeuLeuGlnProLeuValCysTyrMetValGlnPheV
                                                                                                                                                                                                    Ą AGCTT CTAGTT CTGA AGAT GCA A AGCTAGAT GCCA A AGCCGCAGA A AGATT GA AGT CA A
                                                                                                                                                                                                                         GCNTGGAGTTAACCGAATTTCTTACNTGGCCTTCTGACCCAGAAATAAGTTTGCTCACTG
                                                                                                                                                                                                                                                                                     Ala-GlyValAsnArgIleSerTyr-TrpProAlaAspProGluIleSerLeuLeuThrG
                                                                      TGGAGGAAACCTCTTACAAATGTGACTTTATTCAGAAAACTGCAAAAGCGTTGCCGGGTG
                                                                                                                                                                                                                                                                                                                                          sGluTyrGluMetLeu 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/11021492 o. US20060031947A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.53e-80
716.00
93.2*
90.1*
40.8*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                489
5
145
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and
                                    242
       479
                                                                                                                                                                        203
                                                                      420
                                                                                                       223
                                                                                                                                        .360
                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                            163
                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                              143
                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                103
```

δ 밁 ঠ 밁

119 728 S 문 S

118

S 문 á 밁 ş

93

488

89

428

88

8

548

103

문 ঠ 8

123

8 밁 S 뫄 5 . G S

217

1388

1328

197

1268

177

1448

ş 밁 8 밁 Ś 밁 á 문 S 밁 S

125

124 968 123 908

밁

1208 157

```
S
                                                                                                                                  B
                                                                                                                                                                Ś
                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: Unsure
; LOCATION: 520..522
; OTHER INFORMATION: Xaa =
US-10-475-075-601
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-785-135-2 (1-339) x US-10-475-075-601 (1-529)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-475-075-601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 601, Application US/10475075
Publication No. US20060053498A1
GENERAL INFORMATION:
APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
APPLICANT: Dumas Milne Edwards, Jean-Baptiste
APPLICANT: Jobert, Severin
APPLICANT: Jobert, Severin
APPLICANT: Giordano, Jean-Yves
TITLE OF INVENTION: Full-length human cDNAs encoding potentially secreted proteins
FILE REFERENCE: G-081US03PCT
CURRENT APPLICATION NUMBER: US/10/475,075
CURRENT FILING DATE: 2001-04-18
NUMBER OF SEQ ID NOS: 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patent.pm
SEQ ID NO 601
LENGTH: 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Unsure
LOCATION: 310..312
OTHER INFORMATION: Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Unsure
LOCATION: 145..147
OTHER INFORMATION: Xaa =
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 124..528
424
                                                                  364
                                101
                                                                                                                                   304 AATGAAGRGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                        244 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                           184 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                       61 AsmGluGluGlyLysHisGlyProLeuGlyAspAsmGluGluArgThrArgValSerThr
                                                                                                                                                                                                                              41 LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGluArgGlnLysSerGlnLys 60
                                                                                                                                                                                                                                                                                             21 ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr 40
                                                                                                                                                                                                                                                                                                                                                                1 MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
                   LeuHisCysSerSerGluAspLeuHisAlaGlyGlnIleAlaLeuIleLysHisGlySer 120
                                                                  GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAAATTGTTGGT
                                                                                    AspLysArgGlnValLysArgThrGlyLeuValValValLysAsnMetLysIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                              1.45e-72
654.00
97.7%
97.7%
37.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             His
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                မ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 129
0
0
                                                                                                   100
                                                                                                                                   363
                                                                                                                                                                        80
                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                           243
                                                                  423
```

```
APPLICANT: Burgess, Christopher C.
APPLICANT: Astle, Jon H.
APPLICANT: Carroll, Eddie III
APPLICANT: Catino, Theodore J.
APPLICANT: Catino, Theodore J.
APPLICANT: Molino, Gary A.
APPLICANT: Molino, Gary A.
APPLICANT: Misgalingam, Arunthathi
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Lewis, Marcia E.
TITLE OF INVENTION: Nucleic Acid Sequences Differentially
TITLE OF INVENTION: Expressed in Cancer Tissue
FILE REFERENCE: 1657/1032
CURRENT APPLICATION NUMBER: US/09/969,034
CURRENT ETLING DATE: 2001-10-02
PRIOR APPLICATION NUMBER: 60/237,271
PRIOR APPLICATION UNMBER: 60/237,271
PRIOR APPLICATION UNMBER: 50/237,271
PRIOR FILING DATE: 2000-02-10
NUMBER OF SEQ ID NOS: 4494
SOCTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 951
LENGTH: 562
                                     밁
                                                                          S
                                                                                                                   밁
                                                                                                                                                  δ
                                                                                                                                                                                                밁
                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-785-135-2 (1-339) x US-09-969-034-951 (1-562)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-969-034-951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 951, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
LOCATION: 264, 348, 367, 413, 419, 422, 431, 450, 470, 500, 502, 508, LOCATION: 517
OTHER INFORMATION: n = A,T,C or G
                                                                                                                   351
                                                                                                                                                                                                  291
                                                                                                                                                                                                                                                                             231
                                                                                                                                                                                                                                                                                                                                                           171
                                                                                                                                                                                                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                           79
                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                ThrGlnThrGlySerMetThrGlyGlnIleProArgLeuSerLysValAsnLeuPheThr 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetLysGluAlaGlyGlnMetGlnAsnLeuGluSerAlaArgAlaGlyArgSerValSer
LysHis-GlySerArg-LeuLysAsnCysAspLeu-TyrPheSerArgLysProCysSer 135
                                                              e-ValGlyLeuHisCysSer-SerGluAspLeuHisAla---GlyGlnIleAlaLeuIle 116
                                                                                                                                              rThrAsp-LysArgGlnValLys-ArgThrGlyLeuValVal-ValLysAsnMetLysIl 98
                                                                                                                                                                                                                     AsnGluGluGly--LysHisGlyProLeuGlyAspAsnGlu-GluArgThr-ArgValSe 79
                                                                                                                                                                                                                                                                                                 LeuLeuSerLeuTrpMetGluLeuPheProAlaGluAlaGlnArgGlnLysSerGlnLys 60
                                                                                                                                                                                                                                                                                                                                                         ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgLeuLysAsnCysAspLeuTyrPheSerArgLys 132
                                         TGNTGGGTNTCNACTGTTCTNAGTGAAAATTTACATTCCNGGGCCAAATTGCTTTTTATN 470
                                                                                                                   TACTGACAAAAAGACANGTAAAGAAAAACTGGTCTTGTGGTGGGTGAAAAAACATTAAAAT 410
                                                                                                                                                                                                  ANTGANGANGGGANANGCATGGACCCTTNGGAGATANTGANAGAGANGACCCAGAGTNTC
                                                                                                                                                                                                                                                                             CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCANAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09969034
o. US20040110668A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.3e-44
433.50
81.7%
77.1%
24.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    519
                                                                                                                                                                                                    350
                                                                                                                                                                                                                                                                                                                                                                                                                                          : 170
                                                                                                                                                                                                                                                                                 290
                                                                                                                                                                                                                                                                                                                                                             230
```

```
US-10-085-783A-37272
, Sequence 37272, Application US/10085783A
; Publication No. US20040037841A1
; GENERAL INFORMATION:
   APPLICANT: ChondroGene Inc.
; APPLICANT: Liew, C.C.
; APPLICANT: Liew, C.C.
; TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
; FILE REFERENCE: 4231/2002
                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-785-135-2 (1-339) x US-10-242-535A-37272 (1-218)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                             RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: misc_feature
; LOCATION: (20) ... (20)
; OTHER INFORMATION: n is a,
US-10-242-535A-37272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-242-535A-37272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 58994
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37272
LENGTH: 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 37272, Application US/10242535A Publication No. US20040013663A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis FILE REFERENCE: 4231/2005
CURRENT APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: US/085,783
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: ChondroGene Inc. APPLICANT: Liew, C.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Human
FEATURE:
                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                  210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       170 AlaLysLeuAspAlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCys
                                                                                                                                                                                                                                                                                                                                                                                                                    190 ValLeuLeuGlnProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       531 GCTTTGTTTGAAA 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136 Ala-CysLeuLys 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         471 AAACATTGGGTTAAGGGCTGAAAAACTGTNANCTTTANTTTTTCCANAAAACCATGTTTT 530
                                                                                                                                                                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                              GluCysLysGlnGluArgIleLysGluTyrGluMet 241
                                                                                                                                                                                                                                                                                                                                  CysAspPheIleGlnLysIleThrLysThrLeuProAspAlaAsnThrAspPheTyrTyr 229
                                                                                                                                                                                                                                                                                                                                                                                            GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAAAGTTAGATGCCAAAGNAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                                                                                                                                                                                                                                                                                                          TGTGACTTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.39e-37
375.00
98.6%
98.6%
21.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        မ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                       216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           218
71
0
0
                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                    209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
```

```
S
                                                                 밁
                                                                                                                                      밁
                                                                                                                                                                     8
                                                                                                                                                                                                       밁
                                                                                                  S
                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                         US-10-785-135-2 (1-339) x US-10-085-783A-37272 (1-218)
                                                                                                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: misc_feature
; LCCATION: (20)...(20)
COTHER INFORMATION: n is a,
US-10-085-783A-37272
                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOPTWARE: PatentIn version 3.2
SEQ ID NO 37272
LENGTH: 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR FILING DATE: 2001-03-12
PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/085,783A CURRENT FILING DATE: 2002-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Human
FEATURE:
181
                              230
                                                                 121
                                                                                                   210
                                                                                                                                                            190 ValLeuLeuGlnProLeuValCysTyrMetValGlnPheValGluGluThrSerTyrLys
                                                                                                                                                                                                                                          170
                                                                                                                                      13
                                                                                                                                                                                                       1 GCAAAGTTAGATGCCAAAGNAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                GluCysLysGlnGluArgIleLysGluTyrGluMet 241
                                                                                     CysAspPheIleGlnLysIleThrLysThrLeuProAspAlaAsnThrAspPheTyrTyr
                                                                                                                                      GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                               AlaLysLeuAspAlaLysAlaValGluArgLeuLysSerAsnSerArgAlaHisValCys
GAATGTAAACAAGAAAGAATAAAAGAATATGAAATG
                                                                                                                                                                                                                                                                                                                 1.39e-37
375.00
98.6%
98.6%
21.4%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
216
                                                                                                                                        120
                                                                                                                                                                         209
                                                                     180
                                                                                                                                                                                                           60
                                                                                                                                                                                                                                          189
```

Search completed: September 20, Job time: 1489 secs 2006, 04:37:52

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM nucleic -
                                                                                                                                                                                                                                                                                                                                                             ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                    1006.8
646.6
516.6
                                                                                                                                                                                                                                                                                                  1582.8
1582.8
                                          368.4
355.6
294
294
294
228.2
228.2
                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic search, using sw
                                                                                                                                                                                                                                                                               100.0
100.0
64.3
                                                                                                                                                                                                                                                                                                                                                         Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-785-135-1
1582.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            September 20, 2006, 03:42:47; Search time 2237.4 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18892170 segs, 6143817638 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ngcggtcaagcttgaggcgt......atagcaagacctcgactcta 1585
                                                                                                  18.
18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published Applications NA Main: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /EMC_Celerra_SIDS3/ptodata/2/pubpna/USO9C_PUBCOMB.seq:*
/EMC_Celerra_SIDS3/ptodata/2/pubpna/USOA_FUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMC_Celerra_SIDS3/
                                                                                                                                                                                                                                           410846
                        Celerra_SIDS3/ptodata/2/pubpna/US08_PUBCOMB.seq:*
Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
Celerra_SIDS3/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                             DВ
                                                                                                      333611
                                                                                                                                                                                                                                           50
3 US-09-822-846-32

1 US-10-475-075-601

10 US-11-021-492-515

10 US-99-963-903-951

20 US-99-983-802-25

20 US-99-973-278-37

21 US-10-472-533-83

21 US-10-106-698-1661

21 US-10-242-535A-37272

21 US-10-085-783A-37272

21 US-10-357-930-21664
                                                                                                                                                                                                                                      US-09-802-371-1

US-10-785-135-1

US-09-802-371-3

US-10-785-135-3

US-10-481-613-1
                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /ptodata/2/pubpna/US07_PUBCOMB.seq:*
/ptodata/2/pubpna/US08_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (without alignments)
8704.717 Million cell updates/sec
    Sequence 1, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 31, Appli
Sequence 312, Appli
Sequence 515, Appl
Sequence 951, Appl
Sequence 25, Appl
Sequence 25, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37272, A
Sequence 37272, A
Sequence 37272, A
Sequence 37272, A
                                                                                                                                                                                                                                                                                                                                                             Description
```

O	a	Ω	Ω	G	O	a					ი	O	Ω	O	O	O											
45	44	43	42	41	40	39	38	37	36	ω 5	34	ω u	32	<u>ω</u>	30	29	28	27	26	25	24	23	22	21	20	19	18
93.6	ω	93.6		93.6		93.6	94		94	94	94.6	94.8	94.8	94.8	94.8	95.8	170.4	173.2	182.4	182.4	182.4	182.4	182.4	182.4	2		182.4
5.9	•	•	•			5.9	•	•		٠	6.0	•	•	6.0	6.0	6.1	10.8	10.9	11.5		•		11.5	11.5		11.5	11.5
57013	821	821	543	543	543	543	634	634	550	550	24810	997	997			85571		367									386
σ	7	0	12	12	Ų	4	v	4	12	12	8	12	12	12	12	9	9	9	9	9	ø	9	ø	ø	9	9	9
US-10-087-192-1798	US-10-027-632-168343	US-10-027-632-168343	US-10-301-480-769896	US-10-301-480-156487	US-09-925-065A-55249	US-09-925-065A-55249	US-09-925-065A-819261	US-09-925-065A-819261	US-10-301-480-1144776	US-10-301-480-531367	US-10-367-094-145	0-301-480		US-10-301-480-1147562	US-10-301-480-534153	-10-719-993	US-10-357-930-2599	US-10-357-930-4173	?	-10-357-930	US-10-357-930-32940		US-10-357-930-13342	US-10-357-930-11768	US-10-357-930-28548	US-10-357-930-27508	US-10-357-930-22703
Sequence 1798, Ap	168343		ര		Sequence 55249, A	•	Sequence 819261,	Sequence 819261,	Sequence 1144776,	Sequence 531367,	Sequence 145, App	9	Sequence 547122,	Sequence 1147562,	Sequence 534153,	-	•	Sequence 4173, Ap	43346,	41866,	32940,	e 34487,	13342,	•	28548,	27508,	Sequence 22703, A

ALIGNMENTS

US-09-802-371-1

Sequence 1, Application US/09802371 Patent No. US20010036649A1

```
LENGTH: 1585

TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (149)...(1165)
NAME/KEY: misc_feature
LOCATION: (1)...(1585)
OTHER INFORMATION: n = A,T,C or G
US-09-802-371-1
                             Ś
                                                                          밁
문
                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. US20010036649A1el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
                                                                                                                                                            Matches 1584; Conservative
                                                                                                                                                                            Query Match
Best Local Similarity
62
                    62 AGAGGAGGTGAGAGGCGGGGGGGCGTAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCC 121
                                                                                                                    N
                                                                               2 GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                 GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTTACAGTTGCTG
AGAGGAGGTGAGAGGCGGGGGGCCTAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCC
                                                                                                                                                                          100.0%; Score 1582.8;
100.0%; Pred. No. 0;
                                                                                                                                                         .;
                                                                                                                                                            Mismatches
                                                                                                                                                                                                 80
                                                                                                                                                              0; Indels
                                                                                                                                                                                                 3; Length 1585;
                                                                                                                                                              ..
                                                                                                                                                              Gaps
                                                                                                                      61
    121
                                                                               61
                                                                                                                                                              0
```

용

음 성 음 성 음

```
1082
                                                                                                                                                    1022
                                                                                                                                                                                  1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      902
                                                                                                                                                                                                                                                                                                                                        842
                                                                                                                                                                                                                                                                                                                                                                                                    782
                                                                                                                                                                                                                                                                                                                                                                                                                                 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
TGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTACTCATAGTTACTTAAGTTTTGCTG
                                         AACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                                                                                                                                                                                                                 CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                 CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                                                              AAGCAAATACTGATGACTATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAAT
                                                                                                                                                                                                                                                                                              AAGCAAATACTGATGACTATAGGTTTTGGAGAACCTGTGTGAAAAATCCATACTTTAGCAAT
                                                                                                                                                                                                                                                                                                                                        AAACAAGAAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCAT
                                                                                                                                                                                                                                                                                                                                                        AAACAAGAAAGAATAAAAGAATATGAAAIGTTATTTTTGGTTTCAAATGAAGAAAIGCAT
                                                                                                                                                                                                                                                                                                                                                                                                  TTTATTCAAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCAACCTTTGGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACCATGTTCTGCTTGTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAACCATGTTCTGCTTGTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGAAGAGAGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGCCCAGCGGCAAAATCTCAGAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAGCATGGACCCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGCGAGGGCCGGGCAGTCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCGCGAGGGCCGGGCGGTCAGTCAGCACCCAGACTGGCAGCATGACCAGATACCA
                                                                                                                                                     AACTTTABACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                              1201
                                                           1201
                                                                                                                                                       1081
                                                                                                                                                                                    1081
                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
```

음 성 음 성 음 성

Ş 밁 8 뫄 5 밁 ঠ 밁 5 망 5 片 δ 밁 δ В Ş 밁 Ş

밁

```
LENGTH: 1585

TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (149)...(1165)
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(1585)
OTHER INFORMATION: n = A,T,C or G
US-10-785-135-1
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
          S
                              밁
                                               S
                                                                    岛
                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-10-785-135-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 1584; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1202
            122
                               62
                                                 62
TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
                                           AGAGGAGGTGAGAGGCGGGGGCCTAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCC
                                                                    GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGTAGGACAAGAAGAAAGGAGAGGCCCAGTGCAGTGGTTCATGCCTGTAATTGCAA 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAGGCCCTTCTTTCTGCTTCTTGCTTTATGATTTCACTGKTCCTTGAGCCCTCCACTA 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCATACAATATAGAGAAGTTAGTGAGAGCCCTTGAGTAGACAACTCTTTTCTCCCAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGGCCCTTCTTTCTGCTTCTTGCTTTTATGATTTCACTGKTCCTTGAGCCCCTCCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGGGATTCCTTGTAGCCTTATATTCAGTACCACATTTCTACATCAGGCCCTCATTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTGGGATTCCTTGTAGCCTTATATTCAGTACCACATTTCTACATCAGGCCCTCATTAAT 1381
                                                                                                             0; Mismatches
                                                                                                                      Score 1582.8;
Pred. No. 0;
                                                                                                                                 DΒ
                                                                                                             o
;
                                                                                                                                 Length
                                                                                                             ٥,
                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
             181
                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                    121
                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                              0
```

```
1082
1202
                            1202
                                                                                                                                                                                            1022
                                                                                                                                                                                                                           1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                           902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                          962
                                                                                                                                                                                                                                                                                                                            902
                                                                                                                                                                                                                                                                                                                                                                                                                                                            782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                            AAGCAAATACTGATGACTATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTACTCATAGTTACTTAAGTTTTTGCTG
                                                                              AACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                                                                                                                                                                                                                                                                                   CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                                                                                                            AAGCAAATACTGATGACTATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                           AAACAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                              AAACAAGAAAGAATAAAAGAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTATTCAAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCAACCTTTGGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCAACCTTTGGTGTGTATATGGTGCAGTTTGTAGAGGGAGACCTCTTACAAATGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAACCATGTTCTGCTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAACCATGTTCTGCTTGTTTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTTCTAGTGAAGATTTACATGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGAAGAGAACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGAAGAGAGGACCAGAGTATCTACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGCGAGGGCCGGGCCGGTCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGCGAGGGCCGGGCGGTCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
TGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTACTCATAGTTACTTAAGTTTTTGCTG
                                                                AACTTTAAACACTTCGGATTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAAT
                                                                                                                                                                                                                                                             CTAAGGCAAAACATGAAAGACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAG
                                1261
                                                                1201
                                                                                                                             1141
                                                                                                                                                              1141
                                                                                                                                                                                              1081
                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                              1021
 1261
                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
```

8 8 8 8 8

\$

 8 8 8 8 8 8 8

밁

8 8 8 8 8 8

- 8

중 유

5

밁

뭥

8 8 8 8

```
Sequence 3, Application US/09802371

Patent No. US20010036649A1

Patent No. US20010036649A1

PAPPLICANT: Reyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. US2001003649A1el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof

PILE REFERENCE: 35800/213921

CURRENT APPLICATION NUMBER: US/09/802,371

CURRENT FILING DATE: 2001-03-09

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 4

SOFTWARE: PASUSEQ for Windows Version 4.0

SEQ ID NO

SEQ ID NO

CRGANISM: Homo sapiens

US-09-802-371-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
S
                           밁
                                                    á
                                                                               밁
                                                                                                     á
                                                                                                                                    밁
                                                                                                                                                              Ś
                                                                                                                                                                                         밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-09-802-371-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1017; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1262
                                                                                 181
                                                                                                                                                                                                                                                               241
                                                      389
                                                                                                         329
                                                                                                                                     121
                                                                                                                                                                 269
                                                                                                                                                                                                                     209
  449
                                                                                                                                                                                            61
                                                                                                                                                                                                           ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGGGATTCCTTGTAGCCTTATATTCAGTACCACATTTCTACATCAGGCCCCCATTAAT
                                                                                 AATGAAGAGGGAAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                            ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                               CAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTITAGAAGGCTGADACAGGAGATCGCTTGAGGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGGTAGGACAAGAAGAAAGGAAAGGCCCAGTGCAGTGGTTCATGCCTGTAATTGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGGCCCTTCTTTCTGCTTCTTGCTTTTATGATTTCACTGKTCCTTGAGCCCTCCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCATACAATATAGAGAAGTTAGTGAGACCCTTGAGTAGACAACTCTTTCTCCCAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATACAATATAGAGAAGTTAGTGAGACACCCTTGAGTAGACAACTCTTTCTCCCAGCAGT
                             GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                          GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGCTCAGGAGTTCAAGACCAGCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA 508
                                                                                                                                                                                                                                                                                                    64.3%; Score 1017; DB 3; 1 ilarity 100.0%; Pred. No. 2.3e-260; Conservative 0; Mismatches 0;
                                                                                                                                     Length 1017;
                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1381
                                300
                                                          448
                                                                                                               388
                                                                                                                                                                   328
                                                                                                                                                                                              120
                                                                                                                                                                                                                          268
                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                         0
```

```
Sequence 3, Application US/10785135

Publication No. US20040142375A1

PublicANT: Nevers, Rachel

APPLICANT: Rudolph-Owen, Laura

ITTLE OF INVENTION: 26934, A Novel Cytidine Deaminase-Like

ITTLE OF INVENTION: Molecule and Uses Thereof

FILE REFERENCE: 3580/213921

CURRENT APPLICATION NUMBER: US/10/785,135

CURRENT FILING DATE: 2004-02-24

PRIOR APPLICATION NUMBER: US/09/802,371

PRIOR APPLICATION NUMBER: 05/09/802,371

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SOFTWARE: FastSEQ for Windows Version 4.0
                             ; LENGTH: 1017
; TYPE: DNA
; ORGANISM: Homo &
US-10-785-135-3
                                                                                                                                                                                                                                                                                                                                        RESULT 4
US-10-785-135-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1049
                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     749
                                                                                                                                                                                                                                                                                                                                                                                                    CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTCAAACAGTCGGGCCCATGTGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTTGCCACAGGAAATTTGCAAGG 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACTITTGGCCACAGIAGCTTCCAGIGIGCCGAACTTTAAACACTTCGGAITTTAACGT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTTATTTTTGGTTTCAAATGAAGAAAIGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                            sapiens
   64.3%;
   Score 1017;
   BB
   8
 Length 1017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                         á
                                                                                                        맑
                                                                                                                               S
                                                                                                                                                                 밁
                                                                                                                                                                                           á
                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       먉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                 밁
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.0%; Pred. No. 2.3e-260; Matches 1017; Conservative 0; Mismatches 0;
                                                                1109/CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1165
                                                                                                                                     1049
                                                                                                          901
                                                 961
                                                                                                                                                                  841
                                                                                                                                                                                              989
                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                       929
                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                 698
                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                          809
                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                   749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                       AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTTGCCACAGGAAATTGCCAAGG 1108
                                                                                                                                                                                                                           GAGAACCTGTGTAAAATCCATACTTTAGCAATCTAAGGCAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                           GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                       ATGTTATTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                            CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTTACAAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGTCAAACAGTCGGGCCCATGTGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aatgaagaggaaagcatggacccttaggagataatgaagagagaccagagtatctact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                          AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                  CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTTACCGT 900
                                                                                                                                                                                  CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                    ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                             CCGGATGCTAACACTGACTTTTATTATGAATGTAAACAAGAAGAATAAAAAGAATATGAA
                                                                                                                                                                                                                                                                                                                                                                                                       CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTCAAACAGTCGGGCCCATGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    388
```

508

300 448 240 120 268 60 208

540 688

780

928 720 868 660 808 600 748

988

```
APPLICANT: Zhang, Youming
APPLICANT: Moffact, Miriam
APPLICANT: Moffact, Miliam
APPLICANT: Cookson, William
APPLICANT: Tinsley, Jon
TITLE OF INVENTION: Acopy
FILE REFERENCE: 16721-0003US1 / P32688WO/KVC
CURRENT APPLICATION NUMBER: US/10/481,613
CURRENT FILING DATE: 2003-12-19
PRIOR APPLICATION NUMBER: PCT/GB02/02859
PRIOR FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: GB 0115211.5
PRIOR APPLICATION NUMBER: GB 0115212.3
PRIOR APPLICATION NUMBER: GB 0115212.3
PRIOR APPLICATION NUMBER: GB 0115213.1
PRIOR APPLICATION NUMBER: GB 0115213.1
PRIOR APPLICATION NUMBER: GB 0115213.1
PRIOR FILING DATE: 2001-06-21
NUMBER OF SEO ID NOS: 326
SOFTWARE: PatentIn version 3.1
SEO ID NO 1
LENGTH: 410846
                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA; ORGANISM: Homo sapiens US-10-481-613-1
                                                                                                                                          δ
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                      S
                                                                                                             문
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/10481613 Publication No. US20050085627A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 63.6%;
Best Local Similarity 99.8%;
Matches 1006; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                85407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85167
                                                                                                                                                                                                                                                               85527
                                                                                                                                                                                                                                                                                                                                         85467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85347
                                                                                                                                                                                       85587
                                                                                                                                                  1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         578
                                                                                                                                                                                                                          998
                                                                                                                                                                                                                                                                                                    938
                                                                                                                                                                                                                                                                                                                                                                          878
                                                                                                                                                                                                                                                                                                                                                                                                                                                     818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAG
                                                                                                                                                  GAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGGCACTGCATG
                                                                                                                                                                                                            GCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGTAGCAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                         AACACTGACTTTATTATGAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAAC
GATTGGTTGGGTTGTATTTGTCTCTGAAGTGTTCGTCTCATTTATGGTAGAGTTCATTTA 1237
                                                        GTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCGTAAATTGGGGCT
                                                                                                               GAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCCAAGGCACTGCATG
                                                                                                                                                                                                                                                               TGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATCCTACTTTTG
                                                                                                                                                                                                                                                                                   TIGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTGGAGAACCTG
                                                                                                                                                                                                                                                                                                                                                             TTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTTGGAGAAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                 AACACTGACTTTTATTATGAATGTAAACAAGAAAGAATAAAAAGAATATGAAATGTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTGCCGGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACAAAAACATTGCCGGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTCGGGCCCATGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTCGGGCCCATGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1006.8; DB 10; Pred. No. 4.1e-256; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 10; Length 410846;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                            1177
                                                                                                                 85706
                                                                                                                                                      1117
                                                                                                                                                                                                                              1057
                                                                                                                                                                                                                                                                                                                                                                                                                   85466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             637
                                                                                                                                                                                                                                                                                                      997
                                                                                                                                                                                                                                                                                                                                                                                937
                                                                                                                                                                                                                                                                                                                                                                                                                                                        877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     697
                                        85766
                                                                                                                                                                                           85646
                                                                                                                                                                                                                                                                   85586
                                                                                                                                                                                                                                                                                                                                           85526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
RESULT 6
US-09-822-846-332
; Sequence 332, Application US/09822846
; Publication No. US20030027139A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
밁
                         5
                                                                                                                        US-09-822-846-332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/195,605
PRIOR FILING DATE: 2000-04-06
NUMBER OF SEQ ID NOS: 629
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 332
LENGTH: 2029
                                                        Query Match
Best Local Similarity
Matches 649; Conserv
                                                                                                                                                                                                                                                         FILE REFERENCE: GIN 6400
CURRENT APPLICATION NUMBER: US/09/822,846
CURRENT FILING DATE: 2001-03-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Jacobs,
APPLICANT: McCoy,
APPLICANT: LaValli
                                                                                                                                                                                                                                                                                                           APPLICANT: Gulukota, Kamalakar
APPLICANT: Graham, James R.
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING NOVEL SECRETED PROTEINS
                                                                                                                                     LENGTH: 2029
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1298
                    500 CATGGGTCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAAACCATGTTCTGCTTGT
McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa J
Evans, Cheryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGACAACTCTTTCTCCCAGCAGTTTTGGGATTCCTTGTAGCCTTATATTCAGTACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCATAGTTACTTAAGTTTTGCTGTTCATACAATATAGAGAAGTTAGTGAGACCCTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGGAGTTCAAGACCAGCGTGGGCAACATAGCAAGACCTCGACTCTA 1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGTTCATGCCTGTAATTGCAACACTTTAGAAGGCTGADACAGGAGGATCGCTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTGKTCCTTGAGCCCTCCACTAAAGGTAGGACAAGAAGAAAGGAGAGAGGCCCAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCTACATCAGGCCCTCATTAATCTAGGCCCTTCTTTCTGCTTCTTGCTTTTATGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGACAACTCTTTCTCCCCAGCAGTTTTGGGATTCCTTGTAGCCTTATATTCAGTACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCTACATCAGGCCCTCATTAATCTAGGCCCTTCTTCTGCTTCTTGCTTTATGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATAGTTACTTAAGTTTTGCTGTTCATACAATATAGAGAAGTTAGTGAGACCCTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Agostino, Michael J.
Steininger II, Robert
Bowman, Michael R.
                                                                                                                                                                                                                                                                                                                                                                                       Fechtel, Kim
Howes, Steven H.
                                                                                                                                                                                                                                                                                                                                                                                                                  Spaulding, Vikki
Wong, Gordon G.
Clark, Hilary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Merberg, David
Treacy, Maurice
                                                                                                                                                                                                                                                                                                                                                                       Resnick, Richard J.
                                                             Conservative
                                                                          40.9%;
                                                             0
                                                           Score 646.6; DB 3;
Pred. No. 2.9e-161;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٦.
                                                                Indels
                                                                                             Length
                                                                                             2029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86174
                                                                <u>,</u>
                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1357
    60
                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85826
                                                                0
```

```
RESULT 7
US-10-475-075-601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                 Sequence 601, Application US/10475075
Publication No. US20060053498A1
GENERAL INFORMATION:
APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
APPLICANT: Jobert, Severin
APPLICANT: HILLE GLOVANO JOBERT, SEVERING CONTRIBUTION FOR SEVERING DATE: 203-10-17
PRIOR APPLICATION NUMBER: US/10/475,075
CURRENT FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 918
SOFTWARE: Patent.pm
SEQ ID NO 601
                                                                                                       ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: 124..528
                                  LOCATION: 145..147
OTHER INFORMATION: Xaa = Gln
                                                                  FEATURE:
NAME/KEY: Unsure
                                                                                                                                                                               TYPE: DNA
NAME/KEY: Unsure
                                                                                                                                                                                              ENGTH: 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATATGGTGCAGTTTGTAGAGGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGA 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGA 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTIGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATCTCGAACTGAGGA 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTACCGTAGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAA 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATATGAAATGTTATTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                    ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             619
```

```
Ş
                     á
                                                   밁
                                                                           á
                                                                                                        밁
                                                                                                                               S
                                                                                                                                                             밁
                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                         멼
                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: Unsure
LOCATION: 520..522
OTHER INFORMATION:
US-10-475-075-601
                                                                                                                                                                                     Ś
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 310..312
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
481
                         506
                                                    421
                                                                               446
                                                                                                          361
                                                                                                                                   386
                                                                                                                                                              301
                                                                                                                                                                                        326
                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                 206
                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                     146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        516;
                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                          86
                                                                                                                                                                                                                                                                                                                                                                                                                                                        26 GGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTGAGAGGAGGAGGTGAGAGAGGCGGGGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                     Ļ
                 TCAAGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAAACC 546
                                                                                                                              ACTGACAAAAGACAGGTAAAGAGAAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTT
                                                                                                                                                                                 AAAAATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCT
                                                                                                                                                                                                                                 ACTCTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAG
                                                                                                                                                                                                                                                                                                                                          GGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAGAGGGGCGAGGGCCGGGCGGTCAGTC
                                                                                                                                                                                                                                                                                                                                                                             TAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCCTTGGCAGCAGAGGACGCTAGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                   TAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCCTTGGCAGCAGAGGACGCTAGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTGAGAGGAGGCGAGAGAGGCGGGGGGCGC
TCAAGGCTGAAAAACTGTGATCCTTATTTTTCCAGAAAACM
                                                     GGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGG
                                                                  GGTCTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGG
                                                                                                          ACTGACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTT
                                                                                                                                                                                                                   ACTOTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAG
                                                                                                                                                                                                                                                                      AGCACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTC
                                                                                                                                                                                                                                                                                     AGCACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTC
                                                                                                                                                                                                                                                                                                                          GGGATGAAAGAAGCTGGGCAGATGSAAAATCTGGAGAGCGCGAGGGCCGGGCGGTCAGTC
                                                                                                                                                             AAAAATGAAGRGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGACCAGAGTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 516.6; DB 11; Pred. No. 6.9e-127; 3; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ĄΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
  521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                360
                                                                                                                                                                                           385
                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                              325
                                                                                                                                                                                                                                                                                                                                                                                                           145
                                                        480
                                                                                  505
                                                                                                             420
                                                                                                                                      445
                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                  265
                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
RESULT 8
US-11-021-492-515
Sequence 515, Application US/11021492
Publication No. US20060031947A1
GENERAL INFORMATION:
APPLICANT: Abuin, Alejandro
APPLICANT: Zambrowicz, Brian
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: Novel Mutated Mammalian Cells and
TITLE OF INVENTION: Novel Mutated Mammalian Cells and
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: US/11/021,492
CURRENT FILING DATE: 2004-07-25
NUMBER OF SEQ ID NOS: 698
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 515
LENGTH: 489
TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: misc_feature
LOCATION: 183, 7206
```

```
APPLICANT: Burgess, Christopher C.
APPLICANT: Astle, Jon H.
APPLICANT: Catriol, Eddie III
APPLICANT: Catriol, Eddie III
APPLICANT: Dwivedi, Poornima
APPLICANT: Dwivedi, Poornima
APPLICANT: Molino, Gary A.
APPLICANT: Molino, Gary A.
APPLICANT: Lewis, Marcia E.
TITLE OF INVENTION: Nucleic Acid Sequences Differentially
TITLE OF INVENTION: Expressed in Cancer Tissue
FILE REFERENCE: 1657/1032
CURRENT APPLICATION NUMBER: US/09/969,034
CURRENT FILING DATE: 2001-10-02
PRIOR APPLICATION NUMBER: 60/237,271
PRIOR APPLICATION NUMBER: 60/237,271
PRIOR APPLICATION SIMPLE SOFTWARE: FASTSEQ for Windows Version 4.0
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 951
LENGTH: 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-969-034-951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: n = A,T,C
US-11-021-492-515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 951, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
FEATURE:

NAME/KEY: misc_feature

LOCATION: 264, 348, 367, 413, 41

LOCATION: 517

OTHER INFORMATION: n = A,T,C or

-09-969-034-951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 429; Conserv
                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  399 AGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      519 ACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATGATTGTAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   459 CTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGGAAACCTCTTACAAATGTGACTTTATTCAGAAAACTGCAAAAAGCGTTGCCGGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAACACTGACTITTATTATGAATGTAAACAAGAAGAATAAAAGAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAAACATTGCCGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTTCTAGTTCTGAAGATGCAAAGCTAGATGCCAAAAGCCGCAGAAAGATTGAAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CNTGGAGTTAACCGAATTTCTTACNTGGCCTTCTGACCCAGAAATAAGTTTGCTCACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C-TGGAGTTAACCGAATTTCATAC-TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCCGGGCCCATGTGTGTGTTACTCCAGCCGTTGGTGTTACATGGTGCAGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTCGGGCCCATGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGTGATCTTTATTTTTCAAGAAAACCATGTTCTGCTTGTTTGAAAATGATAGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGTGACGAAAACTGGTCTTGTGGTGGTG-AAAACATGAAGATCATTGGTCTTCACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09969034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US20040110668A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            မ္
                                                              419,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 368.4; DB 16;
Pred. No. 2.5e-87;
0; Mismatches 46;
                                                                422,
                                                                450,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
```

```
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,926
PRIOR FILING DATE: EARLIER FILING DATE: 1999-01-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/13684
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,926
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,793
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,793
PRIOR FILING DATE: EARLIER APPLICATION NUMBER: 60/051,925
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,925
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,929
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,803
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,803
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-983-802-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 25, Application US/09983802
publication No. US20030022185A1
GENERAL INFORMATION:
APPLICANT: Fischer et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 88.9
Matches 481; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZOIDE
CURRENT APPLICATION NUMBER: US/09/983,802
CURRENT FILING DATE: 2001-10-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41 GCCGTTGCCTTACAGTTGCTGAGAGGAGGTGAGAGGCGGGGGGGCGCTAGGGCCGAGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       À 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A 566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGGCTGAAAAACTGTGATCTTTA-TTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAGGTAAAG-AGAACTGGTCTTGTGGT-GGTGAAAAACATGAAAATTGTT-GGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAGCATGGACCCTTAGGAGATAATGAAAGAGAACCCCAGAGTNTCTACTGACAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAGCATGGACCCTTAGGAGATAATGAA--GAGAGGACCAGAGTATCTACTGAC-AAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGA--GG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCTGACTGGGAGAGGTTTCCTTGGCAGCAGGACGCTAGGTTTGGGATGAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTGTTCT-AGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACA----TGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACANGTAAAGAAAAACTGGTCTTGTGGTGGGTGAAAAACATTAAAATTGNTGGGTNTCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGATGGAGCTCTTTCCAGCANAAGCCCAGCGGCAAAAATCTCAGAAAAATGAAGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCTGACTGGGAGAGGTTTCCTTGGCAGCAGGAGGACGCTAGGTTTGGGATGAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTGTTCTNAGTGAAAATTTACATTCCNGGGCCAAATTGCTTTTTATNAAACATTGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACTCTGCTCAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 355.6; DB 3; Pred. No. 7.1e-84; 0; Mismatches 45;
APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                    PCT/US98/13684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     φ
```

```
SOFTWARE: Pa
SEQ ID NO 25
LENGTH: 155
                                                                                                                      COCATION: (1248)
OTHER INFORMATION: I
NAME/KEY: SITE
LOCATION: (1389)
OTHER INFORMATION: I
NAME/KEY: SITE
LOCATION: (1391)
                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: EAPNUMBER OF SEQ ID NOS:
                                                                                                           OTHER INFORMATION:
                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                 NAME/KEY: SITE
LOCATION: (139)
                                                                OTHER INFORMATION:
                                                                            VAME/KEY: SITE
LOCATION: (1393)
                                                                                                                                                                                                                                AME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
FILING DATE:
APPLICATION
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                        PILING DATE: EARLIER FILI APPLICATION NUMBER: EARLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
TION: (1396)
TINFORMATION:
TEXT: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                             1555
                                                                                                                                                                                                                                                                                                                         PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : EARLIER FILING NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : EARLIER FILING NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: EARLIER EARLIER
                                                                                                                                                                                                                                                                                                                                                      EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                        EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EARLIER FILING
                                                                                                                                                        Ħ
                   Ħ
                                                                Ħ
                                                                                                            Ħ
                                                                                                                                                                                                   Ħ
                   equals a,t,g,
                                                                                                                                                        equals
                                                                                                                                                                                                 equals
                                                                equals
                                                                                                                                                                                                                                                                                                                                                                                                                      FILING
                                                              a,t,g,
                                                                                                           a,t,g,
                                                                                                                                                      a,t,g,
                                                                                                                                                                                                   a, t, g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/051,932
DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE: 1997-08-18
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/051,928 DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                유
                                                                                                                                                         ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                      60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                     60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/052,799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/051,930
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LOCATION: (2551); OTHER INFORMATION: n
US-09-983-802-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Sim
Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25, Application US/09984490 Publication No. US20030064412A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/984,490
CURRENT FILING DATE: 2001-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: EARLIER
                                                                                                                        APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                      APPLICATION NUMBER: EARLIER
                                                   FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                      FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1269 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     560 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                        EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 294; DB 3;
Pred. No. 3.6e-67;
                                                                                  R APPLICATION NUMBER: 6
G DATE: 1997-07-08
R APPLICATION NUMBER: 6
G DATE: 1997-07-08
                                                      APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                       APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/227,357
DATE: 1999-01-08
APPLICATION NUMBER: PCT/US98/13684
DATE: 1998-07-07
APPLICATION NUMBER: 60/051,926
DATE: 1997-07-08
                         APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                  APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                               APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                            APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ဇ္ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1555;
               60/052,733
                                          60/051,920
                                                                                                  60/051,930
                                                                                                                              60/051,916
                                                                                                                                                           60/051,932
                                                                                                                                                                                      60/051,931
                                                                                                                                                                                                                 60/052,732
                                                                                                                                                                                                                                              60/052,803
                                                                                                                                                                                                                                                                           60/051,929
                                                                                                                                                                                                                                                                                                       60/051,925
                                                                                                                                                                                                                                                                                                                                   60/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
문
                                                                                                                                  US-09-984-490-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: Pares.
SOPTWARE: Pares.
SEQ ID NO 25
TONGTH: 1555
                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1555
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
NUMBER OF SEQ ID NO
                                                                                                                                                 NAME/KBY: SITE LOCATION: (1551) OTHER INFORMATION:
                                                                                                                                                                                                LOCATION: (1396)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: SITE
LOCATION: (1389)
OTHER INFORMATION: n
                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: SITE
LOCATION: (124
                                                                                                                                                                                                                                   NAME/KEY: SITE
                                                                                                                                                                                                                                                                                  NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                 NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: EARLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER
FILING DATE: EARLIER FILING
APPLICATION NUMBER: EARLIER
FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: EARLIER
 1209
                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PatentIn Ver.
                   TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA 619
 TTTTTĀĀTGCĀTGGĀĀGĀGĀGTGĀĀTGAĀACCGĀĀTTTCĀNĀCTGCCCTGCTGĀTCCĀGĀĀ 1268
                                                                                                                                                                                                                                                                                                                   (1391)
                                                                                                                                                                                                                                                                                                                                                                                                                    (1248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOS: 672
In Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER FILING
                                                                                                                                                                                                                                               ¤
                                                                                                                                                                                                                                                                                                                                                                                                     Ħ
                                                                                                                                                 ¤
                                                                                                                                                                                                  Ħ
                                                                                                                                                                                                                                                                                                  Ħ
                                                                                                                                                equals
                                                                                                                                                                                                  equals
                                                                                                                                                                                                                                                 equals
                                                                                                                                                                                                                                                                                                  equals
                                                                                                                                                                                                                                                                                                                                                 equals
                                                                                                                                                                                                                                                                                                                                                                                                   equals a,t,g,
                                                                                 18.6%;
                                                                                                                                                a, t, g,
                                                                                                                                                                                                a,t,g,
                                                                                                                                                                                                                                                 a,t,g,
                                                                                                                                                                                                                                                                                                a,t,g,
                                                                                                                                                                                                                                                                                                                                                 a,t,g,
                                                                Score 294; DB
Pred. No. 3.6e-
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
DATE: 1997-09-12
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,950
DATE: 1997-08-18
APPLICATION NUMBER: 60/055,947
DATE: 1997-08-18
APPLICATION NUMBER: 60/055,964
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,954
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/052,795
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE: 1997-09-12
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1997-08-18
APPLICATION NUMBER: 60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,953
DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/058,663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051,928
                                                                                                                                                                                                                                                                                                                                                    or
P
                                                                                                                                                                                                                                                                                                                                                                                                     or
C
                                                                                                                                                   ဝူ
                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                   ç
                                                                               294;
No. 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1997-08-18
                                                                               DB 3;
                                                                   15;
                                                                                               Length 1555;
                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/058,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/051,919
                                                                  0
                                                                  Gaps
                                                                   0
```

```
RESULT 12
US-09-973-278-37
; Sequence 37, Applicat:
; Dublication No. US200;
; Dublication No. US200;
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/051,929
PRIOR FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/973,278
CURRENT FILING DATE: 2001-10-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Fischer et
TITLE OF INVENTION: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/239,899
PRIOR FILING DATE: 2000-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE:
                                                                                                                                              APPLICATION NUMBER: 60/052,733 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/052,732
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/052,793
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1999-01-08
APPLICATION NUMBER: PCT/US98/13684
FILING DATE: 1998-07-07
APPLICATION NUMBER: 60/051,926
                                 APPLICATION NUMBER: 60/051,928
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/055,722
                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-0:
APPLICATION NUMBER:
FILING DATE: 1997-0:
                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                             FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
                                                                                                                                                                                                                        APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/051,918 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-
                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/051,930
                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-07-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-07-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1329
APPLICATION NUMBER:
                                                                                           FILING DATE:
                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NANANGGNGCAGTTTGTAGAGGAGGCCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT 1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09973278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US20040044191A1
                                                                                             1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                            1997-07-08
                 1997-08-18
                                                                                                                                                                                                         1997-07-08
                                                                                                                                                                                                                                                                                                                                                           1997-07-
                                                                                                                                                                                                                                                                                                                      1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                     60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09/227,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            679
```

APPLICATION NUMBER: 60/055,948
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,949
FILING DATE: 1997-08-18

```
밁
                                                                                                                                                                     S
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: n equals a,t,g, US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (1393)...(1393)
O'HER INFORMATION: n equals a,t,g, o
NAME/KEY: misc feature
LOCATION: (1396)...(1396)
O'HER INFORMATION: n equals a,t,g, o
NAME/KEY: misc feature
LOCATION: (1551)...(1551)
                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 947
SOFTWARE: PatentIn Ver. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,947
PRIOR FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: (1391)..(139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc f
LOCATION: (1248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (1391)..(1391)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: n equals a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc feature 
LOCATION: (1389)..(1389)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOCATION: (1248)..(1248)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/058,660 FILING DATE: 1997-09-12 APPLICATION NUMBER: 60/058,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,684
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,984
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/058,664
FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/058,785
FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/055,954 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-08-18
                                                                                                                                   1269 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG 1328
                                                                                                                                                                                                               1209 TTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                     560
740 TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTTACA 799
                                                                                                                                                                                                                                                                                         300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1555
                                                         GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                   ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                           TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                       18.6%; ilarity 95.2%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  feature
                                                                                                                                                                                                                                                                                       Score 294; DB Pred. No. 3.6e 0; Mismatches
                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                         o
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ი
                                                                                                                                                                                                                                                                                                           3.6e-67;
                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                             Length 1555;
                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                               1268
                                                           1388
                                                                                                 739
                                                                                                                                                                           679
                                                                                                                                                                                                                                                     619
```

```
밁
                                                                                                                                                                             S
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
, NAME/KEY: misc_feature
, LOCATION: (1551)..(1551)
, OTHER INFORMATION: n equals a,t,g, or US-10-472-533-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                    S
                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/472,533
CURRENT FILING DATE: 2003-09-20
PRIOR APPLICATION NUMBER: US 60/331,287
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/306,171
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-07
PRIOR APPLICATION NUMBER: US 60/277,340
PRIOR FILING DATE: 2001-03-21
PRIOR FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-472-533-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 300; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: P
SEQ ID NO 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 83, App. Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Human Secreted Proteins FILE REFERENCE: PS906PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1396)..(1396)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
LOCATION: (1248)...(1248)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (1389)...(1389)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: (1393)..(1393)
DTHER_INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
OCATION: (1391)..(139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OCATION: (1391)..(1391)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                       1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA 1448
                                            089
                                                                                                                                                                                                                                                                                                                      560 тторанантотнантостораютть в советте в том в посторот в постор в пос
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PatentIn Ver.
ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG 679
                                                                                                                                                                                                                                                       TTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10472533
vo. US20050197285A1
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 18.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 294; DB 10;
Pred. No. 3.6e-67;
                                                                                                                  ttctagttctgaagatgcaaagttagatgccaaagcagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ō
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATTATGAATGTAAACAAGAAAGAATAAAA 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1555;
                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                  1328
                                                                                                                                                                                                                                                               1268
                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      859
                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
CURRENT APPLICATION NUMBER: US/10/106,698
CURRENT FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26524
PRIOR FILING DATE: 2000-09-28
PRIOR REPLICATION NUMBER: US 60/157,137
PRIOR FILING DATE: 1999-09-29
PRIOR APPLICATION NUMBER: US 60/163,280
PRIOR APPLICATION NUMBER: US 60/163,280
PRIOR FILING DATE: 1999-11-03
NUMBER OF SEQ ID NOS: 8564
SOFTWARE: PACENTIN Ver. 3.0
SEQ ID NO 1661
                                                                                                                                                  밁
                                                                                                                                                                                        á
RESULT 15
US-10-242-535A-37272
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
US-10-106-698-1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Ruben et al.
TITLE OF INVENTION: Colon and Colon Cancer Associated Polynucleotides and Polypeptide
FILE REFERENCE: PA005P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1661, Application US/10106698 Publication No. US20030109690A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: misc feature
LOCATION: (919)...(919)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc feature
LOCATION: (987)...(987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 99
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1329 GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT 1388
                                                                                                                                                    318
                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                             198 AGAGGAGGCGAGAGGCGGGGCGCTAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                        138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         995
                                                                                                                                                                                                                                                                                                                                                                                                                              N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                              AGGCTTTCTAAAGTCAACCTTTTCACTCTGCTCAGCCTCTG
                                                                                                                                                    AGCGCGAGGGCCGGCCAGTCAGCACCCAGACTGGCAGCATGACCGGTGAGTGTCCG 377
                                                                                                                                                                              AGCGCGAGGGCCGGGCGGTCAGTCAGCACCCAGACTGGCAGCATGACCGGTCAGATACCA 241
                                                                                                                                                                                                                                   TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
                                                                                                                                                                                                                                                           TTGGCAGCAGAGGACGCTAGGTTTGGGATGAAAGAAGCTGGGCAGATGCAAAATCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                        GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCTAAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                              GCGGTCAAGCTTGAGGCGTCATCTGGCTGCGCCTAGTGGGCCGTTGCCTTACAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATATGAAATGTTA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGTAAACAAGAAGAATAAAA 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA 799
                                                                            GÉACCCTGCTCCCGCCACCCTACCTTTCGCTCTGCCCTGTG
                                                                                                                                                                                                                                                                                                                                                 AGAGGAGGTGAGAGGCGGGGGGCTAGGGCCGAGATCATGTCTGACTGGGAGAGGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 228.2; DB 6;
Pred. No. 1e-49;
0; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                            418
                                                                                                                  282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1448
                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                   317
                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
Sequence 37272, Application US/10242535A

Publication No. US20040013663A1

GENERAL INFORMATION:
APPLICANT: Chondrogene Inc.
APPLICANT: Chondrogene Inc.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2005

FILE REFERENCE: 4231/2005

CURRENT PILING DATE: 2002-09-12

PRIOR APPLICATION NUMBER: US 10/085,783

PRIOR APPLICATION NUMBER: US 60/305,340

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR APPLICATION NUMBER: US 60/375,017

PRIOR APPLICATION NUMBER: US 60/275,017
                                                                                                              Ś
                                                                                                                                                    밁
                                                                                                                                                                                                                                밁
밁
                                  Ś
                                                                            밁
                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: PatentIn version 3.2
SEQ ID NO 372/2
LENGTH: 218
                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc feature
LOCATION: (20)..(20)
OTHER IMPORMATION: n is a, c,
10-242-535A-37272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                         Local Similarity 99.9 nes 217; Conservative
                                      836
                                                                                                      776 TGTGACTTTATTCAAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT 835
                                                                                                                                                                                                                                                        181
                                                                            121
                                                                                                                                                                          61 GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                                1 GCAAAGTTAGATGCCAAAGNAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                                    GAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTT 873
                                                                            TGTGACTTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT
GAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTT
                                                                                                                                                                                                                                                                                                                           13.7%;
                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                           Score 217; DB 8;
Pred. No. 4.2e-47;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                         g, or
                                                                                                                                                                                                                                                                                                                                             Length 218,
  218
                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                        120
                                                                              180
                                                                                                                                                                                              775
                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                             0
```

Search completed: September 20, 2006, 04:44:21 Job time: 2239.4 secs

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                              588
395.2
368.4
294
294
294
254
254
254
254
254
                                                                                                                                                                                                                                                            1017
646.6
                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications NA Main:*

1: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US08_PUBCOMB.seq:*

2: EMC_Celerra_SIDS3/ptodata/2/pubpna/US08_PUBCOMB.seq:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09A_PUBCOMB.seq:*

4: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09B_PUBCOMB.seq:*

5: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US09C_PUBCOMB.seq:*

6: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

7: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

7: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

9: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

10: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

11: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

12: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US10B_PUBCOMB.seq:*

13: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*

14: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*

15: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*

16: /EMC_Celerra_SIDS3/ptodata/2/pubpna/US11B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    September 20, 2006, 03:42:47; Search time 1435.6 Seconds (without alignments) 8704.717 Million cell updates/
                             100.0
100.0
100.0
63.6
57.8
38.9
38.9
28.9
28.9
28.9
28.9
21.3
                                                                                                                                                                                                                                                                                                                                                                                           Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18892170 seqs, 6143817638 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 atgaaagaagctgggcagat.....ctggtgagttacatagatcg 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-785-135-3
1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.9
Copyright (c) 1993 - 2006 Biocceleration Ltd.
      489
1555
1555
1555
1555
1555
218
218
386
                                                                                                                                                                                                                                                                                                                                                1017
3 US-09-802-371-3
8 US-10-785-135-3
8 US-10-785-135-3
9 US-09-802-371-1
10 US-10-785-135-1
10 US-10-481-613-1
11 US-10-475-075-601
11 US-10-21-422-515
3 US-09-983-802-25
3 US-10-242-535A-37272
US-10-242-535A-37272
US-10-357-930-21664
US-10-357-930-22703
                                                                                                                                                                                                                                                            \omega \omega \omega \omega \omega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                        Sequence 3, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 32, App
Sequence 601, Appli
Sequence 515, Appl
Sequence 25, Appl
Sequence 25, Appl
Sequence 37, Appl
Sequence 37, Appl
Sequence 37272, A
                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cell updates/sec
```

	٠,	Ω (C			a	Ω	a	a					Ω	a											
4 4 5	Δ .	4	41	40	39	8	37	36	35	34	ü	32	31	30	29	28	27	26	N 5	24	23	22	21	20	19	18
42.8 42.8	42.8	43	4	43.4	43.6	43.8	44.2	48	48.2	67	67	67	72.4	94.8	94.8	170.4	171.8	173.2	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4
4.2	4.2	4.	4.2		4.3	4.3	4.3	. 7	4.7	6.6	6.6	6.6	7.1	9.3	9.3	16.8	16.9	17.0	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
9 63	858	8979	8979	398	3673778	231004	6182	36.73778	1105	600	600	600	436	997	997	434	995	367	432	432	432	399	393	390	386	386
9	12	8	7	9	7	11	7	7	9	10	10	10	w	12	12	9	6	9	9	9	9	9	9	9	9	9
US-10-301-480-1156435 US-10-357-930-7680	US-10-301-480-543026	US-10-221-613-138	US-10-311-455-758	US-10-425-115-64127	US-10-312-841-1	US-10-330-773-832	US-10-311-455-1987	US-10-312-841-1	US-10-425-115-173590	US-10-972-079-10230	US-10-972-079-10229	US-10-972-079-10228	US-09-918-995-28592	US-10-301-480-1160531	US-10-301-480-547122	US-10-357-930-2599	US-10-106-698-1661	US-10-357-930-4173	US-10-357-930-43346	US-10-357-930-41866	US-10-357-930-32940	US-10-357-930-34487	US-10-357-930-13342	US-10-357-930-11768	US-10-357-930-28548	US-10-357-930-27508
Sequence 1156435, Sequence 7680, Ap	Ø		Sequence 758, App	Sequence 64127, A	Sequence 1, Appli	Sequence 832, App	Sequence 1987, Ap	Sequence 1, Appli	Sequence 173590,	Sequence 10230, A	-	Sequence 10228, A	Sequence 28592, A	Sequence 1160531,	Sequence 547122,	Sequence 2599, Ap	-	4173,	Sequence 43346, A	41866,	-		•	11768,	28548,	•

ALIGNMENTS

LENGTH: 1017
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-802-371-3 ঠ 밁 Ş 밁 δ ₽ RESULT 1 US-09-802-371-3 CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FASCSEQ for Windows Version 4.0
SEQ ID NO 3 GENERAL INFORMATION: Sequence 3, Application US/09802371 Patent No. US20010036649A1 Matches 1017; Conservative Query Match 100.0%; Score 1017; DB 3; Length 1017; Best Local Similarity 100.0%; Pred. No. 4.5e-250; APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A No. US20010036649A1el Cytidine
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921 181 121 121 61 61 ACCCAGACTGGCAGCATGACCGGTCAGATACCCAAGGCTTTCTAAAGTCAACCTTTTCACT 120 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAAATCTCAGAAA CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA 180 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT 120 0; Mismatches Indels ٥, Gaps 240 60

```
APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A Novel Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/10/785,135
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/802,371
PRIOR FILING DATE: 2001-03-09
PRIOR PILING DATE: 2001-03-09
PRIOR PILING DATE: 2001-03-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                 RESULT 2
US-10-785-135-3
; Sequence 3, Application US/10785135
; Publication No. US20040142375A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                               뮵
                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                               AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGAAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                             CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                        CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                           GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                      GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                  CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 3
; LENGTH: 1017
; TYPE: DNA
; ORGANISM: Homo (
US-10-785-135-3
                    δ
                                                 망
                                                               Ś
                                                                                      밁
                                                                                                              á
                                                                                                                                         밁
                                                                                                                                                         Ś
                                                                                                                                                                                     밁
                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 1017; Conserv
                           901
                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                      541
     901
                                                                      841
                                                                                              781
                                                                                                                    781
                                                                                                                                           721
                                                                                                                                                                721
                                                                                                                                                                                       661
                                                                                                                                                                                                              199
                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .19
    AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                            GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                      CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                AAGTCAAACAGTCGGGCCCATGTGTGTGTGTTTACTTCAACCTTTGGTGTGTTTATATGGTG
                                                 CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                           ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                       ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                             CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                          ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                       ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGCTGAAAAACCTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAAACATGAAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGAGCCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 1017; DB 8; llarity 100.0%; Pred. No. 4.5e-250; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                      840
                                                    900
                                                                                                 840
                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
        960
                             960
                                                                           900
                                                                                                                                             780
                                                                                                                                                                   780
                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
```

```
Sequence 1, Application US/09802371

Patent No. US20010036649A1

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel
APPLICANT: Meyers, Rachel
APPLICANT: Meyers, Laura
TITLE OF INVENTION: 26934, A No. US20010036649A1el Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921
CURRENT APPLICATION NUMBER: US/09/802,371
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION NUMBER: 60/188,294
PRIOR APPLICATION SUMBER: 60/188,294
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEG ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1
LENGTH: 1686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; LOCATION: (149)...(1165)
; NAME/KEY: misc_feature
; LOCATION: (1)...(1585)
; OTHER INFORMATION: n = A,T,C
US-09-802-371-1
                                                                      망
                                                                                               5
                                                                                                                                    밁
                                                                                                                                                                         8
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                               Ъ
                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-802-371-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 1017; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1585
                                                                          569
                                                                                                                                                509
                                                                                                                                                                                       361
                                                                                                                                                                                                                          449
                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                  389
                                                                                                                                                                                                                                                                                                                                                                           329
                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                   269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
629
                                   481
                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA 360
                                                                                                                                                                                                                                                                                                  GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                  AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGAGCCCAGCGGCAAAAAATCTCAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG
                     CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                           ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG 480
                                                                                                                                                                         AGGCTGAAAAACTGTGATCTTTATTTTTTCCAGAAAACCATGTTCTGCTTTGTATATG
                                                                                                                                                                                                                            CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                        GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
 CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                          ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                  AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                             AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 1017; DB 3; Length 1585; 100.0%; Pred. No. 5.8e-250; tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                       328
                                     540
                                                                                                                                                    568
                                                                                                                                                                                         420
                                                                                                                                                                                                                            508
                                                                                                                                                                                                                                                                                                    448
                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             268
                                                                          628
                                                                                                                                                                                                                                                                                                                                                                             388
```

```
Sequence 1, Application US/10785135

Publication No. US20040142375A1

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel
APPLICANT: Rudolph-Owen, Laura
TITLE OF INVENTION: 26934, A Novel Cytidine Deaminase-Like
TITLE OF INVENTION: Molecule and Uses Thereof
FILE REFERENCE: 35800/213921

CURRENT APPLICATION NUMBER: US/10/785,135

CURRENT APPLICATION NUMBER: US/09/802,371

PRIOR APPLICATION NUMBER: US/09/802,371

PRIOR APPLICATION NUMBER: US/09/802,371

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR APPLICATION NUMBER: 60/188,294

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEG ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

TENCETT. 1555
                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-785-135-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                            US-10-785-135-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 6
                                                            Query Match
Best Local Similarity
Matches 1017; Conserv
                                                                                                                                    LENGTH: 1585

TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (149)...(1165)
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(1585)
OTHER INFORMATION: n = A,7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1109
 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG 960
 CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTTAAACACTTTCGGATTTTTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTCAAACAGTCGGGCCCATGTGTGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 1017; DB 8; ilarity 100.0%; Pred. No. 5.8e-250; Conservative 0; Mismatches 0;
                                                                                                                                          A,T,C
                                                                                                                                          မ္
                                                                                           Length 1585;
                                                               0,
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
    208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  748
                                                                 0
```

```
US-09-822-846-332
US-09-822-846-332
Sequence 332, Application US/09822846
; Publication No. US20030027139A1
; GENERAL INFORMATION:
; APPLICANT: Jacobs, Kenneth
; APPLICANT: MCCOy, John M.
; APPLICANT: LaVallie, Edward R.
                                                                                                                                                          문
                                                                                                                                                                             중 유
                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                              1049
                                                                                                                                      961
                                                                                                                                                                                   106
                                                                                                                                                                                                         989
                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                    929
                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                 869
                                                                                                                                                                                                                                                                                                                                              809
                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                        749
                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                389
                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                     689
                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                 CACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                 GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                                                                                           AAGTCAAACAGTCGGGCCCATGTGTGTGTGTCTTACTTCAACCTTTGGTGTTGTTATATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GA CAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                           CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                      CTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGT
                                                                                                                                                                                                                                                     GAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATC
                                                                                                                                                                                                                                                                                               ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                              ATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTG
                                                                                                                                                                                                                                                                                                                                            CCGGATGCTAACACTGTTTATTATGAATGTAACAAGAAGAAGAATAAAAGAATATGAA
                                                                                                                                                                                                                                                                                                                                                                                        CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAAACATGAAAAATTGTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGAAGAGGGAAAGCATGGACCCTTAGGAGAATAATGAAGAGAGGAGCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                              AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                          AGCAATCCAGAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCACTGTTCTAGTGAAGATTTACATGCCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGAAGAGGAAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA
                                                                                                                                                                                                            1048
                                                                                                                                                                                    960
                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                       988
                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                   928
                                                                                                                                                                                                                                                                                                                                               868
                                                                                                                                                                                                                                                                                                                                                                                           808
                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       328
                                                                                                                                                                                                                                                                                                                                                                                                                                     748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                      S
                                                                                                              δ
                                                                                                                                         밁
                                                                                                                                                         Ś
                                                                                                                                                                                   밁
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                 日
                                                                  S
                                                                                        밁
```

```
APPLICANT: Collins-Racie, Lisa A.
APPLICANT: Evans, Cheryl
APPLICANT: Merberg, David
APPLICANT: Merberg, Maurice
APPLICANT: Treacy, Maurice
APPLICANT: Spostino, Michael J.
APPLICANT: Spostino, Michael R.
APPLICANT: Bowman, Michael R.
APPLICANT: Spaulding, Vikki
APPLICANT: Bowman, Michael R.
APPLICANT: Howes, Steven H.
APPLICANT: Resnick, Richard J.
APPLICANT: Garkinck, Richard J.
APPLICANT: Genetice Institute, Inc.
APPLICANT: Genetice Institute, Inc.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING
FILE REFRENCE: GIN 6400
CURRENT FILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: US/09/822,846
CURRENT FILING DATE: 2001-03-29
PRIOR FILING DATE: 2000-04-06
NUMBER OF SEQ ID NOS: 629
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3321
LENGTH: 2029
TYPE: DNA
ORGANISM: Homo sapiens
US-09-822-846-332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 649; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 892
                                                     481
                                                                             832
                                                                                                          421
                                                                                                                                    772
                                                                                                                                                                361
                                                                                                                                                                                          712
                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                652
                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                       592
                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                  472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         412
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
GACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGA
                                                                   GACCTTATCCTACTTTTGGCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGA
                                                                                                                       ATAGGTTTGGAGAACCTGTGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAA
                                                                                                                                                                GAATATGAAATGTTATTTTTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACT
                                                                                                                                                                                                                    TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                          TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                        ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63.6%;
ilarity 99.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 646.6; DB 3; Pred. No. 7.8e-155; 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENCODING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NOVEL SECRETED PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                         831
                                                                                                                                                                                                                                                   711
                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          471
                                                      540
                                                                                   891
                                                                                                             480
                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                          651
    600
                            951
                                                                                                                                                                    420
                                                                                                                                                                                               771
                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                      531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

ATTGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATATCGAACTGGTGA 1004

```
밁
                                                                                     á
                                                                                                                             밁
                                                                                                                                                        8
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뮰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-481-613-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-10-481-613-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 57.8%; Score 588; DB 10; I Best Local Similarity 100.0%; Pred. No. 1.4e-138; Matches 588; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/10481613 Publication No. US20050085627A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Zhang, Youming
APPLICANT: Moffatt, Miriam
APPLICANT: Woffatt, Miriam
APPLICANT: Tinsley, Jon
TITLE OF INVENTION: Atopy
FILE REFERENCE: 16721-0003US1 / P32688WO/KVC
CURRENT APPLICATION NUMBER: US/10/481,613
CURRENT FILING DATE: 2003-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: GB 0115211.5
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: GB 0115212.3
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: GB 0115213.1
PRIOR APPLICATION NUMBER: GB 0115213.1
PRIOR FILING DATE: 2001-06-21
NUMBER OF SEQ ID NOS: 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/GB02/02859
PRIOR FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 410846
                                                                                                                                                                                                                                                                                                                                                  85347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85227
                                                                                                                                                                                                                                                                                                                                                                                                                         85287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85167
                                                                                                                               85527
                                                                                                                                                                                                    85467
                                                                                                                                                                                                                                                                            85407
                                                                                                                                                                                                                                                                                                              670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    490
                    910
                                                                                                                                                               790
                                                                                                                                                                                                                                      730
                                                                                                                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                                                                                                                                                           550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          430
GAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGGCACTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGAG
                                                                               GCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCCGGATTTTACCGTAGCAATCCA 909
                                                                                                                                                                                                                                                                                               AACACTGACTTTTATTATGAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTTATTT 729
                                                                                                                                                                                                                                                                                                                                                  GAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAACATTGCCGGATGCT
                                                                                                                                                                                                                                                                                                                                                                       GAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACAAAAAACATTGCCGGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCGGGCCCATGTGTGTGTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTA 85346
                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATATGGTGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGCAAGGCACTGCATGGTTCAGGCCAGGTTATTGGCATCTCGAACTGAGGA 653
                                                         GCCACAGTAGCTTCCAGTGTGCCGAACTTTAAACACTTCGGATTTTACCGTAGCAATCCA
                                                                                                                                                                                                    TTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTGGAGAACCTG
                                                                                                                                                                                                                            TTGGTTTCAAATGAAGAAATGCATAAGCAAATACTGATGACTATAGGTTTTGGAGAACCTG
                                                                                                                                                                                                                                                                            AACACTGACTTTTATTATGAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTTATTT
                                                                                                                                                                 TGTGAAAATCCATACTTTAGCAATCTAAGGCAAAACATGAAAGACCTTATCCTACTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 410846;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                       669
                                                                                                                               85586
                                                                                                                                                                   849
                                                                                                                                                                                                                                        789
                                                                                                                                                                                                                                                                                                                                                                                                                                                             609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            489
                                                         85646
                      969
                                                                                                                                                                                                      85526
                                                                                                                                                                                                                                                                            85466
                                                                                                                                                                                                                                                                                                                                                  85406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85286
                              Ş
                                                                          밁
                                                                                                          8
                                                                                                                                                밁
                                                                                                                                                                               Š
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
```

```
; FEATURE:
; NAME/KEY: Unsure
; LOCATION: 520..522
; OTHER INFORMATION: X
US-10-475-075-601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
US-10-475-075-601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 601, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 601
                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 529 TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 124..528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: G-081US03PCT
CURRENT APPLICATION NUMBER: US/10/475,075
CURRENT FILING DATE: 2003-10-17
PRIOR APPLICATION NUMBER: PCT/IB01/00914
PRIOR FILING DATE: 2001-04-18
NUMBER OF SEQ ID NOS: 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: Unsure
LOCATION: 310..312
OTHER INFORMATION: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dumas Milne Edwards, Jean-Baptiste APPLICANT: Jobert, Severin APPLICANT: Giordano, Jean-Yves TITLE OF INVENTION: Pull-length human cDNAs end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
APPLICANT: Dumas Milne Edwar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patent.pm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 145..147
OTHER INFORMATION: Xaa = Gln or Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: Unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                     Loca1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85647 GAACAGATTAATGAAATTCACAATCAAAGTTTGCCACAGGAAATTGCAAGGCACTGCATG 85706
424
                                                                    364
                                301
                                                                                                       241
                                                                                                                                       304
                                                                                                                                                                      181 AATGAAGAGGGAAAGCATGGACCCTTAGGAGATAATGAAGAGAGGACCAGAGTATCTACT
                                                                                                                                                                                                          244
                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                124 ATGAAAGAAGCTGGGCAGATGSAAAATCTGGAGAGCGCGAGGGCCGGGCGGTCAGTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                     394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970 GTTCAGGCCAGGTTATTGGCATATCGAACTGGTGAGTTACATAGATCG 1017
                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529 .
                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                               <u> ÀCCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT</u>
                                                                                                                                                                                                                                                                                                 ACCCAGACTGGCAGCATGACCGGTCAGATACCAAAGGCTTTCTAAAGTCAAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                    CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                       CTCCACTGTTCTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCA
                                                                      GACAAAAGACAGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGT
                                                                                                                                                                                                          CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA
                                                                                                                                                                                                                              CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCCAGCGGCAAAAATCTCAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10475075
                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                  38.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       = His or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glu
                                                                                                                                                                                                                                                                                                                                                                                                                   Score 395.2; DB 1
Pred. No. 1.3e-90;
3; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding potentially secreted proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85754
                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                    360
                                                                                                                                                                                                                                                                                                                 120
     483
                                                                        423
                                                                                                         300
                                                                                                                                                                          240
                                                                                                                                                                                                                                                                               243
                                                                                                                                                                                                                                                                                                                                                  183
                                                                                                                                         363
                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

AGGCTGAAAAACTGTGATCTTTATTTTTCCAGAAAAACC

398

```
APPLICANT: Abuin, Alejandro
APPLICANT: Abuin, Alejandro
APPLICANT: Sands, Arthur T.
APPLICANT: Sands, Arthur T.
APPLICANT: Sands, Arthur T.
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: Novel Mutated Mammalian Cells and TITLE OF INVENTION: Animals
FILE REFERENCE: LEX-0368-USA
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: US 60/307,670
PRIOR FILING DATE: 2001-07-25
NUMBER OF SEQ ID NOS: 698
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 515
SEQ ID NO 515
SEQ ID NO 515
SEQ ID NO ANABORDE: USANISM: Mus musculus
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: n = A,T,C or G
RESULT 9
US-09-983-802-25
; Sequence 25, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-11-021-492-515
US-11-021-492-515
Sequence 515, Application US/11021492
Publication No. US20060031947A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                            549
                                                                                                                                                                                                                                                                                                                                                                                                                          431
                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   371
                                                                                                                             669
                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                242
                                                                                                                                                                                                                                                                                                                                                  489
                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                             422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251 AGGTAAAGAGAACTGGTCTTGTGGTGGTGAAAAACATGAAAATTGTTGGTCTCCACTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAACATGGGTCAAGGCTGAAAA
                                                                                                                                                                                      AGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTTACAAAAAACATTGCCGGATGC
                                                                                                                                                                                                                                                              CAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                          CNTGGAGTTAACCGAATTTCTTACNTGGCCTTCTGACCCAGAAATAAGTTTGCTCACTGA
                                                                                                                                                                                                                                                                                                                                                                                                             C-TGGAGTTAACCGAATTTCATAC-TGGCCTGCTGATCCAGAAATAAGTTTGCTTACGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTGTGATCTTTATTTTTCCAGAAAACCATGTTCTGCTTGTTTGAAAATGATTGTDAAATG
                                                                                                                               TAACACTGACTTTATTATGAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTTA 726
                                                                                                                                                                   GGAGGAAACCTCTTACAAATGTGACTTTATTCAGAAAACTGCAAAAGCGTTGCCGGGTGC
                                                                                                                                                                                                                                          CAGCCGGGCCCATGTGTGTGTTACTCCAGCCGTTGGTGTTACATGGTGCAGTTTGT
                                                                                                                                                                                                                                                                                                                AGCTTCTAGTTCTGAAGATGCAAAGCTAGATGCCAAAGCCGCAGAAAGATTGAAGTCAAA
                                                                                                                                                                                                                                                                                                                                   GGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTGTGATCTTTATTTTTCAAGAAAACCATGTTCTGCTTGTTTGAAAATGATAGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGTGAAGACTTACATACTGGGCAAATTGCTCTCATTAAGCATGGGTCCAGGCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTGACGAAAACTGGTCTTGTGGTGGTG-AAAACATGAAGATCATTGGTCTTCACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGCTGAAAAACTGTGATCCTTATTTTTCCAGAAAACM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 368.4; DB 16;
Pred: No. 9.5e-84;
0; Mismatches 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       u
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                               479
                                                                                                                                                                                                         899
                                                                                                                                                                                                                                                                                608
                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                    548
                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                              488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                       421
                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ω
```

Application US/09983802

```
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: FARLIER PRIOR APPLICATION NUMBER: EARLIER FILING PATES EARLIER FILING PRIOR FILING DATES EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/983,802
CURRENT FILING DATE: 2001-10-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: EARLIER PRIOR FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Fischer et a. TITLE OF INVENTION: 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OR FILING DATE: EARLIER FILING D
OR APPLICATION NUMBER: EARLIER A
OR FILING DATE: EARLIER FILING D
OR APPLICATION NUMBER: EARLIER AL
OR FILING DATE: EARLIER FILING DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER FILLING D
DR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER FILLING D
DR APPLICATION NUMBER: EARLIER A
DR APPLICATION NUMBER: EARLIER A
DR FILLING DATE: EARLIER FILLING D
R FILLING DATE: EARLIER FILLING D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OR APPLICATION NUMBER: EARLIER A.
OR FILING-DATE: EARLIER FILING D.
OR APPLICATION NUMBER: EARLIER A.
OR FILING DATE: EARLIER FILING D.
OR APPLICATION NUMBER: EARLIER A.
OR FILING DATE: EARLIER FILING D.
OR FILING DATE: EARLIER FILING D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OR FILING DATE: BARLIER FILING DATA PRILING DATE: BARLIER FILING DATE: B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DR FILING DATE: EARLIER FILING DATE EARLIER A PAPILCATION NUMBER: EARLIER A DR FILLING DATE: EARLIER FILING DATE: EARLIER FILING DATE: EARLIER FILING DATE: EARLIER A DR FILLING DATE: EARLIER FILING 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING, DATE: EAKLIER APPLICATION NUMBER: EARLIER APPLICATION NUMBER: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                        FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                         FILING DATE:
APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US20030022185A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . al.
123 Human f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ER APPLICATION NUMBER: 6
(G DATE: 1997-08-18
(R APPLICATION NUMBER: 6
(G DATE: 1997-08-18
(G DATE: 1997-08-18
(G DATE: 1997-08-18
(G DATE: 1997-08-18
(ER APPLICATION NUMBER: 6
(ER APPLICATION NUMBER: 6
(ER APPLICATION NUMBER: 6
(FR APPLICATION NUMBER: 6
(G DATE: 1997-08-18
(G DATE: 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RAPPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ER APPLICATION NUMBER: 6
47 DATE: 1997-07-08
58 APPLICATION NUMBER: 6
59 APPLICATION NUMBER: 6
59 APPLICATION NUMBER: 6
                                                                                        R APPLICATION NUMBER: 6
IG DATE: 1997-08-18
R APPLICATION NUMBER: 6
IG DATE: 1997-08-18
IG DATE: 1997-08-18
IR APPLICATION NUMBER: 6
IR APPLICATION NUMBER: 6
IG DATE: 1997-08-18
IR APPLICATION NUMBER: 6
IG DATE: 1997-09-12
IG DATE: 1997-09-12
IG DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R APPLICATION NUMBER: (G DATE: 1997-07-08 R APPLICATION R APPLICATION R APPLICATION NUMBER: (G DATE: 1997-07-08 R APPLICATION R 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R APPLICATION NUMBER: 6
G DATE: 1997-08-18
R APPLICATION NUMBER: 6
G DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 09/227,357
DATE: 1999-01-08
APPLICATION NUMBER: PCT/US98/1:
DATE: 1998-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: DATE: 1997-07-08
APPLICATION NUMBER:
DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/051,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/051,926
                                                                                                                                                               60/058,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/055,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/055,723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCT/US98/13684
                                                                                                                                                                                                                                                                                                                                                                                          60/055,954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/051,925
```

```
RESULT 10
US-09-984-490-25
Sequence 25, Application US/09984490
Publication No. US20030064412A1
GENERAL INFORMATION:
APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P1
                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: SITE
LOCATION: (1551)
OTHER INFORMATION:
US-09-983-802-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/058,661
PRIOR FILING DATE: EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 25
LENGTH: 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: E. NAME/KEY: SITE LOCATION: (1397)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
CURRENT APPLICATION NUMBER: US/09/984,490

CURRENT FILING DATE: 2001-10-30

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/227,357

PRIOR FILING DATE: EARLIER FILING DATE: 1999-01-08

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/13684

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,926

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (1396)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (1393)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: (1389)
OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: SITE
LOCATION: (1248)
                                                                                                                                                                                                                                                                                                        1449
                                                                                                                                                                                                                                                                                                                                                              1389
                                                                                                                                                                                                                                                                                                                                                                                                                       1329
                                                                                                                                                                                                                                               1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1269
                                                                                                                                                                                                                                                                         712
                                                                                                                                                                                                                                                                                                                                   652
                                                                                                                                                                                                                                                                                                                                                                                          592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  412 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300;
                                                                                                                                                                                                                                                              GAATATGAAATGTTA
                                                                                                                                                                                                                                                                                                                                                               NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                         TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                              GAATATGAAATGTTA
                                                                                                                                                                                                                                                                                                                         TTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        equals a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             equals
                                                                                                                                                                                                                                               1523
                                                                                                                                                                                                                                                                         726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a,t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o
,,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 294; DB 3;
Pred. No. 2.2e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                        1508
                                                                                                                                                                                                                                                                                                                                     711
                                                                                                                                                                                                                                                                                                                                                               1448
                                                                                                                                                                                                                                                                                                                                                                                                                       1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1268
                                                                                                                                                                                                                                                                                                                                                                                            651
                                                                                                                                                                                                                                                                                                                                                                                                                                                   591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  471
```

```
SEQ ID NO 25
LENGTH: 15
                                                            NUMBER OF SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DR FILING DATE: EARLIER FILING D
RR APPLICATION NUMBER: EARLIER A
DR FILING DATE: EARLIER FILING D
DR FILING DATE: EARLIER FILING D
DR FILING DATE: EARLIER FILING D
DR APPLICATION NUMBER: EARLIER A
DR APPLICATION NUMBER: EARLIER A
DR APPLICATION GERMER: EARLIER FILING D
R FILING DATE: EARLIER FILING D
                                                                              R FILING DATE: EARLIER FILING
A APPLICATION NUMBER: EARLIER
RILING DATE: EARLIER FILING
REPLICATION NUMBER: EARLIER
FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING DAPPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                  APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: EARLIER FILING DATE: BARLIER FILING APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                      APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                         APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: EARLIER FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: BARLIER FILING APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: EARLIER FILING
  1555
                                           PatentIn
                                                                   NOS: 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER FILING
                                                                                                                                                                                 R APPLICATION NUMBER: (
G DATE: 1997-08-18
G DATE: 1997-08-18
G DATE: 1997-08-18
G DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G DATE: 1997-07-08
R APPLICATION NUMBER: 6
G DATE: 1997-07-08
R APPLICATION NUMBER: 6
G DATE: 1997-07-08
G DATE: 1997-07-08
R APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                G DATE: 1997-08-18
R APPLICATION NUMBER: 0
G DATE: 1997-08-18
R APPLICATION NUMBER: 0
G DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R APPLICATION NUMBER: 6
G DATE: 1997-07-08
R APPLICATION NUMBER: 6
G DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G DATE: 1997-07-08
R APPLICATION NUMBER: 6
G DATE: 1997-07-08
R APPLICATION NUMBER: 6
                                                                                                                           DATE: 1997-09-12
APPLICATION NUMBER:
DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
DATE: 1997-08-18
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/055,723
APPLICATION NUMBER: 60/055,723
APPLICATION NUMBER: 60/055,948
DATE: 1997-08-18
                                                                                      APPLICATION NUMBER:
DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                        DATE: 1997-08-18
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE: 1997-08-18
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE: 1997-07-08
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/055,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/055,953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/051,932
                                                                                                                                                 60/058,660
                                                                                                                                                                                                                                                                                                                                                          60/055,684
                                                                                                                                                                                                                                                                                                                                                                                                 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                                          60/055,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/055,947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/055,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/055,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/051,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/051,919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/052,795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/052,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/051,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/051,916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/052,732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/052,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/051,925
                                                                                                                                                                                        60/058,664
                                                                                                                                                                                                                                                                          60/055,954
                                                                                                                                                                                                                                                                                                                   60/055,984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/051,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/052,793
```

ORGANISM: Homo sapic FEATURE: NAME/KEY: SITE LOCATION: (1248) OTHER INFORMATION: 1

n equals a,t,g,

TYPE: DNA

sapiens

```
Sequence 37, Application US/09973278

Publication No. US20040044191A1

GENERAL INFORMATION:
APPLICANT: Fischer et al.

FITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P2

CURRENT APPLICATION NUMBER: US/09/973,278

CURRENT FILING DATE: 2001-10-10

PRIOR FILING DATE: 2000-10-13

PRIOR APPLICATION NUMBER: 09/227,357

PRIOR APPLICATION NUMBER: 09/227,357

PRIOR APPLICATION NUMBER: 007/227,357

PRIOR APPLICATION NUMBER: 007/257,357

PRIOR APPLICATION NUMBER: 007/257,357

PRIOR APPLICATION NUMBER: 607/051,926

PRIOR APPLICATION NUMBER: 607/051,926

PRIOR APPLICATION NUMBER: 607/051,926

PRIOR APPLICATION NUMBER: 607/052,793

PRIOR APPLICATION NUMBER: 607/052,793

PRIOR APPLICATION NUMBER: 607/052,793

PRIOR APPLICATION NUMBER: 607/052,793

PRIOR APPLICATION NUMBER: 607/052,793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11.
US-09-973-278-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 28.9
Best Local Similarity 95.2
Matches 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: n equals a,t,g, or NAME/KEY: SITE LOCATION: (1551)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: SITE
LOCATION: (1396)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: SITE
LOCATION: (139)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION:
NAME/KEY: SITE
                                      FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,929
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,803 FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           412 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATATGAAATGTTA 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAAGATTGAAGTCAAACAGTCGGGCCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTAATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1393)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        equals a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 294; DB 3;
Pred. No. 2.2e-64;
0; Mismatches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Length 1555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1268
```

```
SOFTWARE: Paten
SEQ ID NO 37
FRNGTH: 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/051,928
PRIOR FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: 60/055,722
PRIOR FILLING DATE: 1997-08-18
PRIOR APPLICATION NUMBER: 60/055,723
PRIOR APPLICATION NUMBER: 60/055,948
PRIOR APPLICATION NUMBER: 60/055,949
LENGTH: 1555

TYPE: DNA.
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
LOCATION: (1248) .(1248)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (1389) .(1389)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (1391) .(1391)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (1391) .(1393)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (1393) .(1393)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/058,660 PRIOR FILING DATE: 1997-09-12 PRIOR APPLICATION NUMBER: 60/058,661 PRIOR FILING DATE: 1997-09-12 NUMBER OF SEQ ID NOS: 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,953
FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,950
FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-09-12
APPLICATION NUMBER: 60/0
FILING DATE: 1997-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/055,684
FILING-DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/052,795
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,733
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/051,930
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,918
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,916
FILING DATE: 1997-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,931
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/058,785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/055,954 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/055,984 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/055,964 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/055,947 FILING DATE: 1997-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/056,360
                                                                                                                                                                                                                                                                                                                                                                                                                        PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/058,664
                                                                                                      ò
                                                                                                                                                                        ġ
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                           9
                                                                                                      Ö,
                                                                                                                                                                        or
Or
                                                                                                                                                                           a
```

```
US-10-472-533-83; Sequence 83, App.; Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 28.9%;
Best Local Similarity 95.2%;
                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/277,340 PRIOR FILING DATE: 2001-03-21 NUMBER OF SEQ ID NOS: 650 SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/472,533
CURRENT FILING DATE: 2003-09-20
PRIOR APPLICATION NUMBER: US 60/331,287
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/306,171
PRIOR PILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Human Genome Sciences, Inc. TITLE OF INVENTION: Human Secreted Proteins FILE REFERENCE: PS906PCT
                                                      NAME/KEY: misc feature
LOCATION: (1391)...(1391)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                               LENGTH: 1555
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                      NAME/KEY: misc_feature
LOCATION: (1389)...(1389)
OTHER_INFORMATION: n equals
                                                                                                                                                                                                                FEATURE:
NAME/KEY: misc_feature
LOCATION: (1248)...(1248)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: (1551)..(1551)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (1396)..(1396)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (1393)..(1393)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1389 NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1209 TTTTTÄATGCATGGÄÄGAGCTGGÄGTGÄÄCCGÄÄTTTCÄNÄCTGCCCTGCTGATCCAGAÄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               412 TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAATATGAAATGTTA 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAACATTGCCGGATGCTAACACTGACTTTTATTATGAATGTAAACAAGAAGAATAAAA 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG 1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10472533
No. US20050197285A1
                                                                                                                                                                                                                        a,t,g,
                                                          a,t,g,
                                                                                                                                          a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 294; DB 3;
Pred. No. 2.2e-64;
0; Mismatches 15;
                                                                                                                                                                                                                        õ
                                                               ö
                                                                                                                                          е
Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1448
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-969-034-951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뫉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-472-533-83
                                                                                                                                        NUMBER OF SEQ ID NOS: 4494
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 951, Application US/09969034 Publication No. US20040110668A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local
Matches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                            APPLICANT: Dwivedi, Poornima
APPLICANT: Molino, Gary A.
APPLICANT: Thiagalingam, Arunthathi
APPLICANT: Lewis, Marcia E.
TITLE OF INVENTION: Nucleic Acid Sequences Differentially
TITLE OF INVENTION: Expressed in Cancer Tissue
FILE REFERENCE: 1657/1032
CURRENT FILING DATE: 2001-10-02
PRIOR APPLICATION NUMBER: US/09/969,034
CURRENT FILING DATE: 2000-02-10
PRIOR PILING DATE: 2000-02-10
PRIOR FILING DATE: 2000-02-10
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Burgess, Christopher C.
                                                                        TYPE: DNA ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc_feature
LOCATION: (1551). (1551)
OTHER INFORMATION: n equals a,t,g, or
               NAME/KEY: misc_feature
LOCATION: 264, 348, 367,
LOCATION: 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: misc feature
LOCATION: (1396)..(1396)
OTHER INFORMATION: n equals
OTHER INFORMATION: n = A, T, C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: n equals a,t,g, or c
                                                                                                                           LENGTH: 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1269 ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1209 TITTTÄATGCATGGAAGAGCTGGAGTGAACCGAATTTCANACTGCCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGTGTCTTACTTCAACCTTTGGTGTGT 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGTTTGCTTACGGAGGCTTCTAGTTCTGAAGATGCAAAGTTAGATGCCAAAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAAAATGATTGTAAATGCTGGAGTTAACCGAATTTCATACTGGCCTGCTGATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATATGAAATGTTA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATATGAAATGTTA 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NANANGGNGCAGTTTGTAGAGGAGACCTCTTACAAATGTGACTTTATTCAAAAAATTACA 1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAACATTGCCGGATGCTAACACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Astle, Jon H
                                                                                                                                                                                                                                                                                                                                                                                                     Carroll, Eddie III
Catino, Theodore J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28.9%;
                                      413,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a,t,g,
                                      419,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 294; DB 10;
Pred. No. 2.2e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                      422, 431, 450, 470, 500, 502, 508,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGAATGTAAACAAGAAAGAATAAAA 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1268
```

Length 562;

```
RESULT 14
US-10-242-535A-37272
; Sequence 37272, Application US/10242535A
; Publication No. US20040013663A1
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                         US-10-242-535A-37272
                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 107085,783
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-02-28
                                                                                                                                                                       SEQ ID NO 37272
LENGTH: 218
TYPE: DNA
ORGANISM: Human
PEATURE:
                               Query Match
Best Local Similarity
Matches 217; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis FILE REFERENCE: 4231/2005 CURRENT APPLICATION NUMBER: US/10/242,535A CURRENT FILING DATE: 2002-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: ChondroGene Inc. APPLICANT: Liew, C.C.
                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 58994
SOFTWARE: PatentIn version
                                                                                                                    NAME/KEY: misc_feature
LOCATION: (20)..(20)
OTHER INFORMATION: n is a, c,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      111
   508 GCAAAGTTAGATGCCAAAGCAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAACATTGGGTTAAGGGCTGAAAAACTGTNANCTTTANTTTTTCCANAAAAACCATGTTTT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTGTTTGAAAA 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CA----TGGGTCAAGGCTGAAAAACTGTGATCTTTA-TTTTTCCAGAAAAACCATGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTT-GGTCTCCACTGTTCT-AGTGAAGATTTACATGCCGGGCAGATTGCTCTTATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACTGAC-AAAAGACAGGTAAAG-AGAACTGGTCTTGTGGT-GGTGAAAAAACATGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTTTGTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGNTGGGTNTCNACTGTTCTNAGTGAAAATTTACATTCCNGGGCCAAATTGCTTTTTATN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACTGACAAAAAGACANGTAAAGAAAAACTGGTCTTGTGGTGGGTGAAAAACATTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGAAGAAGGGAAAAAGCATGGACCCTTAGGAGATAATGAAAGAGAAGACCCAGAGTNTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGAAGA--GGGAAAGCATGGACCCTTAGGAGATAATGAA--GAGAGGACCAGAGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCTCAGCCTCTGGATGGAGCTCTTTCCAGCAGAAGCCCAGCGGCAAAAAATCTCAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCAGACTGGCAGCATGACCGGTCAGATACCAAGGCTTTCTAAAGTCAACCTTTTCACT
                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25.0%;
                                                   21.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         543
                                  Score 217; DB 8;
pred. No. 4.5e-45;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 254; DB 3; Length 56
Pred. No. 2.4e-54;
0; Mismatches 41; Indels
                                                                                                                        g, or
                                                                     Length 218,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15;
                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
     567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  230
                                    0
```

```
Sequence 37272, Application US/10085783A

Publication No. US20040037841A1

GENERAL INFORMATION:
APPLICANT: Chondrogene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2002

CURRENT APPLICATION NUMBER: US/10/085,783A

CURRENT FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-12
SOUNDER OF SEQ ID NOS: 58994
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37272
LENGTH: 218
TYPE: DNA
ORGANISM: Human
Search completed: September
Job time : 1441.6 secs
                                                                                                                                                            S
                                                                                            S
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature; LOCATION: (20)...(20); OTHER INFORMATION: n is a, US-10-085-783A-37272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
US-10-085-783A-37272
                                                                   밁
                                                                                                                               밁
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                     508 GCAAAGTTAGATGCCAAAGCAGTGGAAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                                                                   181
                                                                                                889
                                                                                                                                 121
                                                                                                                                                                628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                               568 GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA 627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     568
                                                                                                                                                                                                                                                                                                                                   217;
                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                  _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTT 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                              GAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTT 725
                                                                                                                                                                TGTGACTTTATTCAAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT 687
                                                                                                                                                                                                                                                                  GCAAAGTTAGATGCCAAAGNAGTGGAAAGATTGAAGTCAAACAGTCGGGCCCATGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTGACTTTATTCAAAAAATTACAAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGACTTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTTATTAT 180
                                                                                                                                                                                                  GTCTTACTTCAACCTTTGGTGTGTTATATGGTGCAGTTTGTAGAGGAGACCTCTTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATGTAAACAAGAAAGAATAAAAGAATATGAAATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGACTTTATTCAAAAATTACAAAAACATTGCCGGATGCTAACACTGACTTTATTAT
                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                 21.3%;
                  20,
                                                                                                                                                                                                                                                                                                                                                                                                                    ņ
                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                    ĺΩ
                                                                                                                                                                                                                                                                                                                                                    Score 217; DB 8; Pred. No. 4.5e-45;
                                                                                                                                                                                                                                                                                                                                                                                                                       ę,
                  04:44:19
                                                                                                                                                                                                                                                                                                                                                                  Length 218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      218
                                                                   218
                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
```

2006,